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NEWS 24	AUG 15	CAplus currency for Korean patents enhanced
NEWS 25	AUG 25	CA/CAplus, CASREACT, and IFI and USPAT databases enhanced for more flexible patent number searching
NEWS 26	AUG 27	CAS definition of basic patents expanded to ensure comprehensive access to substance and sequence information

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=> s rosuvastatin/prep
             0 ROSUVASTATIN/CT
       4636664 PREP/RL
L1           0 ROSUVASTATIN/PREP
               (ROSUVASTATIN/CT (L) PREP/RL)

=> s rosuvastatin
L2        1158 ROSUVASTATIN

=> l2 and process
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=> s l2 and process
      2678768 PROCESS
L3        118 L2 AND PROCESS

=> s rosuvastatin (l) process
         1158 ROSUVASTATIN
      2678768 PROCESS
L4          86 ROSUVASTATIN (L) PROCESS

=> d l4 , 1-86 bib abs
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L4 ANSWER 1 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:1083706 CAPLUS
TI Rosuvastatin reduces intima-media thickness in hypercholesterolemic subjects with asymptomatic carotid artery disease: the Asymptomatic Carotid Atherosclerotic Disease in Manfredonia (ACADIM) Study
AU Riccioni, Graziano; Bazzano, Lydia A.; Bucciarelli, Tonino; Mancini, Barbara; di Ilio, Emanuela; D'Orazio, Nicolantonio
CS San Camillo de Lellis' Hospital, Cardiology Unit, Manfredonia, Foggia, Italy
SO Expert Opinion on Pharmacotherapy (2008), 9(14), 2403-2408
CODEN: EOPHF7; ISSN: 1465-6566
PB Informa Healthcare
DT Journal
LA English
AB Background: An increase in carotid intima-media thickness (CIMT) represents an early phase of the atherosclerotic process. The aim of this study was to evaluate whether a reduction in CIMT could be seen with only 16 wk of treatment with rosuvastatin (10 mg/day). Methods/results: Sixty-six participants of the ACADIM Study with hypercholesterolemia and carotid atherosclerosis at baseline carotid ultrasound investigation (CUI) were examined, with repeat CUI after 16 wk of treatment. Demog. and lifestyle data were collected, as well as phys. examination and fasting venous blood samples. Total cholesterol, low d. lipoprotein cholesterol (LDL-C) and triglycerides decreased significantly ($p < 0.0001$), while high d. lipoprotein cholesterol (HDL-C) increased significantly ($p < 0.0001$) during the intervention. The mean decrease in IMT of the right and left common carotid arteries (CCAs) was 0.35 and 0.38 mm, resp. ($p < 0.05$ for each). Age and lipid profile parameters were significant predictors of change in CIMT in linear regression analyses after adjustment for established atherosclerosis risk factors. Conclusions: Treatment with rosuvastatin in adults with evidence of subclin. atherosclerosis significantly reduced the CIMT of both CCAs, as well as improving lipid and lipoprotein levels.

L4 ANSWER 2 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:974314 CAPLUS
DN 149:246327
TI An improved process for preparation of rosuvastatin calcium
IN Dandala, Ramesh; Mallela, Sambhu Prasad Sarma; Nandi, Sukumar; Nangi, Gangadhar Bhima Shankar; Buridipadu, Sunil Kumar; Meenakshisunderam, Sivakumaran
PA Aurobindo Pharma Limited, India
SO PCT Int. Appl., 40pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008096257	A1	20080814	WO 2008-IB290	20080204
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI IN 2007-CH277	A	20070208		
IN 2007-CH1121	A	20070529		

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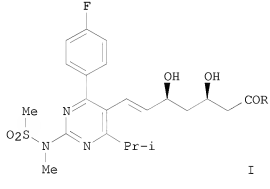

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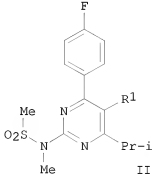


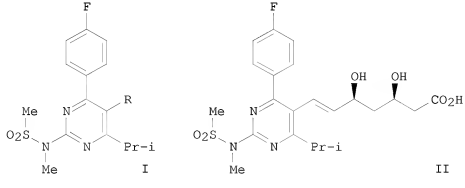
II

AB An improved process was disclosed for the preparation of rosuvastatin calcium I (R = O-.1/2Ca2+). The process comprised a reaction sequence which included a reaction of EtOCOCH2CO2H with a derivative of pentenoic acid II [R1 = CH:CHCH(OSiMe2CMe3)CH2CO2H-(3S,4E)] using Et2Zn in toluene.
RE.CNT 1 THERE ARE 1 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 3 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:942954 CAPLUS
DN 149:246325
TI A method for the purification of rosuvastatin intermediate
IN Kumar, Upparapalli Sampath; Mannathan, Subramaniyan; Sabrinathan, Natarajan; Sivadas, Anand; Palanivel, Senthilnathan; Rao, Siripragada Mahender
PA Orchid Chemicals & Pharmaceuticals Ltd., India
SO PCT Int. Appl., 12pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008093205	A2	20080807	WO 2008-IB189	20080129
W: AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, NO, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI IN 2007-CH220	A	20070131		

OS CASREACT 149:246325
GI



AB A process was disclosed for the preparation and purification of ester I [R = CH:CHCOCH2CH(OSiMe2CMe3)CH2CO2Me-(3R,6E)] which is a useful intermediate for the preparation of rosuvastatin (II) and its pharmaceutically acceptable salts. The process comprised a stereoselective olefination reaction of aldehyde I (R = CHO) with Ph3P:CHCOCH2CH(OSiMe2CMe3)CH2CO2Me-(3R) achieved by refluxing for 10 to 12 h in MeCN to give the desired intermediate ester with 100% yield and purity of 88-95%. The purification method comprised the addition of an aqueous organic acid, such as acetic acid, under stirring conditions in presence of an

organic solvent, such as iso-Pr ether, or alternatively, the addition of aqueous
alc., such as methanol, under stirring conditions in presence of an organic solvent, such as iso-Pr ether.

L4 ANSWER 4 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:927637 CAPLUS
TI A process for preparing amorphous form of rosuvastatin
IN Patel, Dhimant Jasubhai; Vyas, Dipen Hasmukhray; Kumar, Rajiv; Dwivedi, Shriprakash Dhar
PA Cadila Healthcare Limited, India
SO Indian Pat. Appl., 44pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2006MU01654	A	20080725	IN 2006-MU1654	20061006
PRAI IN 2006-MU1654		20061006		

AB The present invention relates to crystalline rosuvastatin tert - butylammonium salt.

L4 ANSWER 5 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:734545 CAPLUS
DN 149:79403
TI An improved process for preparing rosuvastatin calcium
IN Dandala, Ramesh; Mallela, Sambhu Prasad Sarma; Nandi, Sukumar; Nangi, Gangadhar Bhima Shankar; Buridipadu, Sunil Kumar; Meenakshisunderam, Sivakumaran
PA Aurobindo Pharma Limited, India
SO PCT Int. Appl., 27pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008072078	A1	20080619	WO 2007-IB3936	20071211
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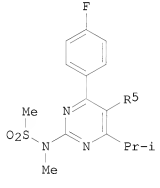
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
PRAI IN 2006-CH2308	A	20061213		

OS CASREACT 149:79403; MARPAT 149:79403
GI



I

AB A process was disclosed for the preparation of intermediates, such as I [R5 = CH:CHCH2OH-(E), CH:CHCHO-(E), CH:CHCO2H-(E), CH:CHCO2OMe-(E), CH:CHCO2CO2Me-(E)], of the therapeutically useful anticholesteremic agents rosuvastatin I [R5 = CH:CHCH(OH)CH2CH(OH)CH2CO2H-(3R,5S,6E)] and rosuvastatin calcium I [R5 = CH:CHCH(OH)CH2CH(OH)CH2CO2-.1/2Ca2+-(3R,5S,6E)].
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 6 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:673569 CAPLUS
DN 149:32135
TI Process for the preparation of rosuvastatin
IN Lenger, Steven Robert
PA Astrazeneca Uk Limited, UK
SO PCT Int. Appl., 44pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008065410	A1	20080605	WO 2007-GB4590	20071130
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	US 20080188657	A1	20080807	US 2007-948615	20071130
PRAI	US 2006-868111P	P	20061201		

OS MARPAT 149:32135
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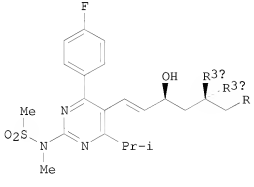

I

AB A process was disclosed for the asym. synthesis of the therapeutically useful anticholesterolemic rosuvastatin I [R = CO2H, R3b = OH, R3a = H] and rosuvastatin calcium I [R = CO2-.1/2Ca2+, R3b = OH, R3a = H] via preparation of an intermediate ketone I [R = CO2Et, R3aR3b = O] employing a stereoselective aldol reaction.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 7 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:673151 CAPLUS
DN 149:32133
TI Process for the preparation and purification of the cholesterol lowering agent rosuvastatin via the formation of rosuvastatin dehydroabietylamine salt
IN Bollikonda, Satyanarayana; Chaganti, Sridhar; Tamma, Ranga Reddy; Dommati, Loka Maheshwari Pochaiah
PA Dr. Reddy's Laboratories Ltd., India; Dr. Reddy's Laboratories, Inc.
SO PCT Int. Appl., 22pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008067440	A2	20080605	WO 2007-US85888	20071129
WO 2008067440	A3	20080717		

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PRAI IN 2006-CH2216	A	20061129	
US 2007-891256P	P	20070223	

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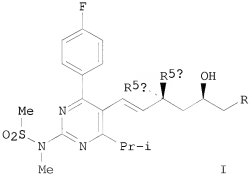

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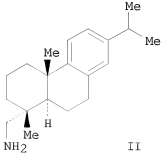

II

AB A process was disclosed for the preparation and purification of the therapeutically useful anticholesterolemic agent rosuvastatin I (R = CO2H, R5a = H, R5b = OH) and its calcium salt I (R = CO2-.1/2Ca2+, R5a = H, R5b = OH) via the formation of the salt of rosuvastatin with dehydroabietylamine (II). The process comprised an olefination reaction of N-[4-(4-fluorophenyl)-5-formyl-6-(1-methylethyl)-2-pyrimidinyl]-N-methylmethanesulfonamide with (R)-

Ph3P:CHCOCH2CH(OSiMe2CMe3)CH2CO2Me, subsequent stereoselective reduction ketone moiety of the resulting ester I (R = CO2Me, R5aR5b = O) using Et2BOMe followed by addition of II to the reaction mixture to give the rosuvastatin dehydroabietylamine salt which was subsequently purified, and finally, conversion of the dehydroabietylamine salt to rosuvastatin calcium and rosuvastatin as the free acid.

L4 ANSWER 8 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:607860 CAPLUS
DN 148:585906
TI Process for the preparation of 4-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidinecarboxaldehyde and tert-butyl 2-[(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]-acetate, key intermediates of rosuvastatin
IN Joshi, Narendra Shriram; Khile, Anil Shahaji; Kajale, Yogesh Baburao; Kamble, Hemant Harishchandra
PA Glenmark Pharmaceuticals Limited, India
SO PCT Int. Appl., 29pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008059519	A2	20080522	WO 2007-IN441	20070924
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RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI IN 2006-MU1556	A	20060925		

OS CASREACT 148:585906
GI

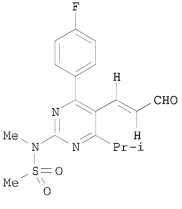
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for the preparation of 4-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidine carboxaldehyde (I, R1 = CHO) and tert-Bu 2-[(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]-acetate (II, R2 = CHO), key intermediates for rosuvastatin, comprises pyridine-sulfur trioxide complex-mediated oxidation of I (R1 = CH2OH) and II (R2 = CH2OH), resp. The first intermediate is prepared via β-alanine-catalyzed condensation of 4-fluorobenzaldehyde with Me isobutyrylacetate followed by heterocyclization with S-methylisothiourea sulfate to give III and further multistep transformations leading to I (R1 = CHO). Thus, a suspension of pyridine-sulfur trioxide complex, pyridine and DMSO is added to a solution of I (R1 = CH2OH) in CH2Cl2 containing DMSO and DIPEA at 0-5° followed by 1h stirring at 0-5°, quenching by water addition and workup to give (I, R1 = CHO) in 90.5% yield.

L4 ANSWER 9 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:552714 CAPLUS
DN 148:537968
TI A process for preparing rosuvastatin calcium
IN Dandala, Ramesh; Mallela, Sambhu Prasad Sarma; Garimella, Narayan K. A. S. S.; Nandi, Sukumar; Buridipad, Sunil Kumar; Nangi, Gangadhar Bhima Shankar; Meenakshisunderam, Sivakumaran
PA Aurobindo Pharma Limited, India
SO PCT Int. Appl., 36pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2008053334	A2	20080508	WO 2007-IB3312	20071029
	WO 2008053334	A3	20080703		
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW		
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA		
PRAI	IN 2006-CH1994	A	20061031		

OS CASREACT 148:537968; MARPAT 148:537968
GI



I

AB The invention relates to a process for the production of rosuvastatin calcium, useful for the treatment of hypercholesterolemia. For instance, Wittig reaction of N-[4-(4-fluorophenyl)-5-formyl-6-(1-methylethyl)-2-pyrimidinyl]-N-methylmethanesulfonamide with Me (triphenylphosphoranylidene)acetate (96.0%) followed by reduction (98.0%) and oxidation (98.5%) gave the compound I.

Rosuvastatin calcium was then prepared from the compound I in a multi-step synthesis.

L4 ANSWER 10 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:475738 CAPLUS
DN 148:471771
TI Novel process for the preparation of statins and their pharmaceutically acceptable salts thereof
IN Satyanarayana Reddy, Manne; Thirumalai Rajan, Srinivasan; Sahadeva Reddy, Maramreddy
PA India
SO PCT Int. Appl., 89pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008044243	A2	20080417	WO 2007-IN459	20071005
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI IN 2006-CH1864	A	20061009		

OS CASREACT 148:471771; MARPAT 148:471771
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Novel process for the preparation of statins I [R = R1, R2, R3, R4, R5, R6, R7; M = metal ion; dashed line = single or double bond] via amides II [R', R'' = H, lower alkyl, aryl, aralkyl; NR'R'' = (un)substituted mono- or bicyclic heterocycle optionally containing addnl. heteroatoms (N, O, S); P1, P2 = alc. protecting group; P1P2 = diol protecting group] and their pharmaceutically acceptable salts. Thus, rosuvastatin calcium I [R = R1, M = Ca, dashed line = double bond] was prepared from N,N-diisopropylacetamide via alkylation with (S)-ClCH2CH(OH)CH2CO2Et, stereoselective reduction with Et2BOMe/NaBH4, isopropylidenation with Me2C(OMe)2, acetoxylation with NaOAc, deacetylation with K2CO3 in MeOH, oxidation with NaOCl/TEMPO, Wittig reaction with R1CH2P(:O)Ph2, deisopropylidenation with aqueous HCl in MeCN, basic hydrolysis with aqueous NaOH, salt formation with Me3CNH2, basic hydrolysis with aqueous NaOH and salt formation with CaCl2/Ca(OAc)2.

L4 ANSWER 11 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:317104 CAPLUS
TI Aortic sclerosis, aortic stenosis and lipid-lowering therapy
AU Rosenhek, Raphael; Baumgartner, Helmut
CS Department of Cardiology, Medical University of Vienna, Vienna, A-1090, Austria
SO Expert Review of Cardiovascular Therapy (2008), 6(3), 385-390
CODEN: ERCTAS; ISSN: 1477-9072
PB Future Drugs Ltd.
DT Journal
LA English
AB Calcific aortic stenosis (AS) is a progressive disease that has, until recently, been considered to be a degenerative and unmodifiable process induced by long-lasting mech. stress. However, histopathol. studies have now demonstrated that the development and progression of calcific AS is based on an active process, sharing a number of similarities with atherosclerosis. Inflammation, lipid infiltration, dystrophic calcification, ossification, platelet deposition and endothelial dysfunction have been observed in both diseases. In addition, several studies have suggested that AS and atherosclerosis share a number of risk factors, such as hypercholesterolemia, elevated lipoprotein (a), smoking, hypertension and diabetes. These findings suggest that statin therapy could be beneficial in AS by its lipid-lowering and/or anti-inflammatory effects, as is the case in atherosclerosis. Although this concept has been supported by exptl. work and by four retrospective clin. studies observing significantly slower rates of hemodynamic progression in statin-treated patients, a prospective randomized trial (Scottish Aortic Stenosis and Lipid Lowering Trial, Impact on Regression [SALTIRE]; 80mg of atorvastatin vs placebo) yielded a neg. result. In contrast to the retrospective analyses, according to the study protocol, patients with hyperlipidemia had to be excluded in this trial. A recent prospective study (Rosuvastatin Affecting Aortic Valve Endothelium [RAAVE]) treating hypercholesteremic patients with rosuvastatin, found a significantly slower rate of progression in these patients compared with patients with normal cholesterol levels who were left untreated, suggesting that statin therapy may only be beneficial in patients with hyperlipidemia. Lipid-lowering therapy with statins can, therefore, currently only be recommended in this subgroup of patients with AS.
RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 12 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:124470 CAPLUS
DN 148:198648
TI Process for preparing powder comprising nanoparticles of sparingly soluble drug
IN Bae, Joon Ho; Lee, Jong Hwi; Lee, Hyeok; Kim, Jung Ju
PA Amorepacific Corporation, S. Korea
SO PCT Int. Appl., 33pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2008013416	A1	20080131	WO 2007-KR3599	20070726
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI KR 2006-70556	A	20060727		

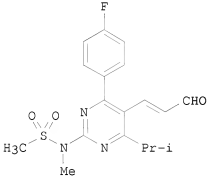
AB A powder comprising nanoparticles of a sparingly water-soluble drug prepared in accordance with the present invention exhibits enhanced bioavailability without generating adverse side effects caused by impurities, while the nano-particle size of the drug remains unchanged when administered. Accordingly, the powder can be useful for the development of a formulation of a sparingly water-soluble drug for oral and parenteral administration.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 13 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:82684 CAPLUS
DN 148:394004
TI Attenuation of NADPH Oxidase Activation and Glomerular Filtration Barrier Remodeling With Statin Treatment
AU Whaley-Connell, Adam; Habibi, Javad; Nistala, Ravi; Cooper, Shawna A.; Karuparthi, Poorna R.; Hayden, Melvin R.; Rehmer, Nathan; DeMarco, Vincent G.; Andresen, Bradley T.; Wei, Yongzhong; Ferrario, Carlos; Sowers, James R.
CS Department of Internal Medicine and the Diabetes and Cardiovascular Laboratory, University of Missouri School of Medicine, Columbia, MO, USA
SO Hypertension (2008), 51(2, Pt. 2), 474-480
CODEN: HPRTDN; ISSN: 0194-911X
PB Lippincott Williams & Wilkins
DT Journal
LA English
AB Activation of reduced nicotinamide-adenine dinucleotide phosphate (NADPH) oxidase by angiotensin II is integral to the formation of oxidative stress in the vasculature and the kidney. 3-Hydroxy-3-methylglutaryl-CoA reductase inhibition is associated with redns. of oxidative stress in the vasculature and kidney and associated decreases in albuminuria. Effects of 3-hydroxy-3-methylglutaryl-CoA reductase inhibition on oxidative stress in the kidney and filtration barrier integrity are poorly understood. To investigate, we used transgenic TG(mRen2)27 (Ren2) rats, which harbor the mouse renin transgene and renin-angiotensin system activation, and an immortalized murine podocyte cell line. We treated young, male Ren2 and Sprague-Dawley rats with rosuvastatin (20 mg/kg IP) or placebo for 21 days. Compared with controls, we observed increases in systolic blood pressure, albuminuria, renal NADPH oxidase activity, and 3-nitrotryosine staining, with redns. in the rosuvastatin-treated Ren2. Structural changes on light and transmission electron microscopy, consistent with periarteriolar fibrosis and podocyte foot-process effacement, were attenuated with statin treatment. Nephrin expression was diminished in the Ren2 kidney and trended to normalize with statin treatment. Angiotensin II-dependent increases in podocyte NADPH oxidase activity and subunit expression (NOX2, NOX4, Rac, and p22phox) and reactive oxygen species generation were decreased after in vitro statin treatment. These data support a role for increased NADPH oxidase activity and subunit expression with resultant reactive oxygen species formation in the kidney and podocyte. Furthermore, statin attenuation of NADPH oxidase activation and reactive oxygen species formation in the kidney/podocyte seems to play roles in the abrogation of oxidative stress-induced filtration barrier injury and consequent albuminuria.
RE.CNT 28 THERE ARE 28 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

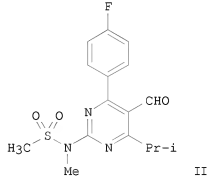
L4 ANSWER 14 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:51765 CAPLUS
DN 148:215069
TI Process for preparation of Rosuvastatin calcium intermediate
IN Huang, Qingyun
PA Anhui Qingyun Pharmaceutical and Chemical Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 18pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 101100459	A	20080109	CN 2007-10024034	20070714
PRAI	CN 2007-10024034		20070714		

GI



I



II

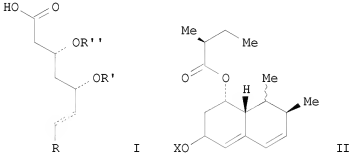
AB This invention provides a process for the preparation of Rosuvastatin calcium intermediate I, which comprises reaction of II with organophosphorus compds. to obtain ketal or imine intermediates, followed by hydrolysis under acidic condition to give the title compound For example, II was reacted with di-Et [2-(cyclohexylamino)vinyl]phosphona te in THF in the presence of sodium hydride, followed by hydrolysis in the presence of oxalic acid to give I (84%). The process has mild reaction condition, low cost, toxicity, energy consumption, and easy purification

L4 ANSWER 15 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2008:15231 CAPLUS
DN 148:183073
TI Effect of rosuvastatin treatment on plasma visfatin levels in patients with primary hyperlipidemia
AU Kostapanos, Michael S.; Derdemezis, Christos S.; Filippatos, Theodosios D.; Milionis, Haralampos J.; Kiortsis, Dimitrios N.; Tselepis, Alexandros D.; Elisaf, Moses S.
CS Department of Internal Medicine, School of Medicine, University of Ioannina, Ioannina, 451 10, Greece
SO European Journal of Pharmacology (2008), 578(2-3), 249-252
CODEN: EJPHAZ; ISSN: 0014-2999
PB Elsevier B.V.
DT Journal
LA English
AB Visfatin is a novel adipokine involved in the process of atherosclerosis. We assessed the effect of rosuvastatin on plasma visfatin levels in patients with primary hyperlipidemia. Eighty hyperlipidemic patients without evidence of cardiovascular disease were randomized to receive either rosuvastatin 10 mg/day or therapeutic lifestyle changes intervention. Plasma visfatin levels were determined at baseline and after 12-wk post-randomization. Rosuvastatin induced a significant decrease in plasma visfatin levels (17.1 ± 2.1 vs. 15.5 ± 2.0 ng/mL, P = 0.03). This effect correlated with baseline visfatin levels (r = 0.51, P < 0.01) and was independent of any lipid-lowering actions of rosuvastatin.
RE.CNT 19 THERE ARE 19 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 16 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1454816 CAPLUS
DN 148:79266
TI Process for the preparation of carbohydrate derivatives of heptanoic acids
IN Klyosov, Anatole; Platt, David
PA Pro-Pharmaceuticals, Inc., USA
SO PCT Int. Appl., 56pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007146823	A2	20071221	WO 2007-US70786	20070608
	WO 2007146823	A3	20080306		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
PRAI	US 2006-804242P	P	20060608		

OS MARPAT 148:79266
GI



AB A process for the preparation of carbohydrate derivs. of heptanoic acids, I, wherein at least one of R' or R'' is a monosaccharide, galactose derivative; R is an (un)substituted aromatic ring, heterocyclic ring system such as indole, pyrrole, pyridine, etc. or (un)substituted cyclic rings are presented. Further, II, wherein X is a monosaccharide or a galactose derivative is alos presented. Hence, I and II can be successfully employed as theraputic agents in the inhibition of statins.

L4 ANSWER 17 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1444836 CAPLUS
DN 148:230008
TI Insulin resistance, oxidative stress, and podocyte injury: role of rosuvastatin modulation of filtration barrier injury
AU Whaley-Connell, Adam; DeMarco, Vincent G.; Lastra, Guido; Manrique, Camila; Nistala, Ravi; Cooper, Shawna A.; Westerly, Blair; Hayden, Melvin R.; Wiedmeyer, Charles; Wei, Yongzhong; Sowers, James R.
CS Department of Internal Medicine, Diabetes and Cardiovascular Laboratory, University of Missouri-Columbia School of Medicine, Columbia, MO, USA
SO American Journal of Nephrology (2008), 28(1), 67-75
CODEN: AJNED9; ISSN: 0250-8095
PB S. Karger AG
DT Journal
LA English
AB Background/Aim: There is an emerging relationship between insulin resistance/hyperinsulinemia, oxidative stress, and glomerular injury manifesting as albuminuria. HMG-CoA reductase inhibitors (statins) have been shown to reduce oxidative stress in the vasculature as well as albuminuria in animal models and in human studies. The glomerular filtration barrier is emerging as a critical determinant of albumin filtration. We investigated the effects of insulin resistance and rosuvastatin or placebo on the glomerular filtration barrier. Method: Young Zucker obese and Zucker lean rats (6-7 wk old) were treated with the HMG-CoA reductase inhibitor rosuvastatin (10 mg/kg/day) or placebo for 21 days. Results: In the Zucker obese rats, homeostasis model assessment-insulin resistance index, oxidative markers (NADPH oxidase activity, reactive oxygen species, and urine isoprostane formation), podocyte foot process effacement, and albuminuria were increased as compared with Zucker lean controls, independent of increases in systolic blood pressure. Albuminuria correlated with podocyte foot process effacement (r2 = 0.61) and insulin level (r2 = 0.69). Rosuvastatin treatment improved albuminuria, filtration barrier indexes, and oxidative stress via copper/zinc superoxide dismutase. Conclusions: These data indicate that hyperinsulinemia together with insulin resistance is associated with podocyte injury and albuminuria independent of the systolic blood pressure. Further, rosuvastatin modulates filtration barrier injury and albuminuria and improves oxidative stress measures via copper/zinc superoxide dismutase.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 18 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1391026 CAPLUS
DN 148:32066
TI Enzymic synthesis of epoxide intermediates for pharmaceutical compounds such as statins
IN Mink, Daniel; Lutje Spelberg, Jeffrey Harald; De Vries, Erik Jan
PA Dsm Ip Assets B.V., Neth.
SO PCT Int. Appl., 31pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007137816	A1	20071206	WO 2007-EP4743	20070529
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI	EP 2006-11099	A	20060530		

OS CASREACT 148:32066
AB The invention relates to a process for the preparation of intermediates, which can suitably be used in the preparation of active pharmaceutical ingredients, in particular in the preparation of HMG-CoA reductase inhibitors, more in particular in the preparation of statins, for example lovastatin, cerivastatin, rosuvastatin, simvastatin, pravastatin, atorvastatin or fluvastatin, most in particular of atorvastatin. The intermediates are prepared according to the process of the invention by reaction of (enantiomerically enriched) 6-chloromethyl-4-hydroxy-tetrahydro-pyran- 2-one or the ring opened formed thereof with cyanide in the presence of a haloalc. dehalogenase, preferably HheA from Arthrobacter sp. strain AD2.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 19 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1303080 CAPLUS
DN 147:520751
TI Process for the preparation of enantiomerically enriched nitriles using halo alcohol dehalogenase
IN Mink, Daniel; Lutje Spelberg, Jeffrey Harald; Vries de Erik, Jan
PA DSM IP Assets B.V., Neth.
SO PCT Int. Appl., 21pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007128469	A1	20071115	WO 2007-EP3852	20070502
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			
PRAI EP 2006-9164	A	20060503		
US 2006-796894P	P	20060503		

OS MARPAT 147:520751
AB The invention relates to a process for the preparation of an enantiomerically enriched nitrile by reacting an epihalohydrin (derivative) with Br- and CN- in the presence of an enantioselective haloalc. dehalogenase. The process of the invention leads to enantiomerically enriched nitriles in a high yield and in a high enantiomeric excess. Preferably the haloalc. dehalogenase used is HheC, more preferably HheC from Agrobacterium radiobacter AD1, most preferably the W249F mutant from HheC from Agrobacterium radiobacter AD1. In one preferred embodiment of the invention the epihalohydrin (derivative) is epichlorohydrin. The enantiomerically enriched nitriles obtained by the process of the invention are especially suitable as intermediates in the preparation of statins, in particular of atorvastatin or rosuvastatin .
RE.CNT 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 20 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1278494 CAPLUS
DN 147:522015
TI Novel process for statins and its pharmaceutically acceptable salts thereof
IN Reddy, Manne Satyanarayana; Rajan, Srinivasan Thirumalai; Reddy, Maramreddy Sahadeva
PA Satyanarayana Reddy, Manne, India; Thirumalai Rajan, Srinivasan; Sahadeva Reddy, Maramreddy
SO PCT Int. Appl., 114 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007125547	A2	20071108	WO 2007-IN172	20070430
	WO 2007125547	A9	20071221		
	WO 2007125547	A3	20080403		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW			
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA			
	IN 2006CH00805	A	20071221	IN 2006-CH805	20060503
PRAI	IN 2006-CH805	A	20060503		
	IN 2007-CH606	A	20070326		

OS CASREACT 147:522015; MARPAT 147:522015
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process was disclosed for the preparation of statins and their pharmaceutically acceptable salts, such as I [R = cyclic statin moiety, such as from rosuvastatin, fluvastatin, pitavastatin, etc.; R1 = OH, O-.M; M = Na+, K+, 1/2Mg2+, 1/2Ca2+]. Thus, rosuvastatin calcium II (R1 = O-.1/2Ca2+, R2 = R3 = H) was prepared starting from 5-(bromomethyl)-4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidine, 5-difluoromethoxy-2-mercaptobenzimidazole, and 3,5-dideoxy-2,4-O-(1-methylethylidene)-erythro-hexuronic acid 1,1-dimethylethyl ester (III) via an olefinic coupling reaction of intermediate sulfone IV with ester III using cesium carbonate in DMSO to form diol-protected ester II (R1 = CMe3, R2R3 = CMe2), conversion of the protected ester rosuvastatin tert-butylamine salt II (R1 = O-.H3N+CMe3, R2 = R3 = H), and finally, preparation of the desired calcium salt by treatment of the tert-Bu amine salt with NaOH followed by treatment of the reaction mixture with CaCl2 and (MeCO2-)2Ca2+. The prepared statins and their salts are therapeutically useful as HMG-CoA reductase inhibitors.

L4 ANSWER 21 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1208628 CAPLUS
TI Isoprenoid depletion by statins antagonizes cytokine-induced down-regulation of endothelial nitric oxide expression and increases no synthase activity in human umbilical vein endothelial cells
AU Jantzen, F.; Koenemann, S.; Wolff, B.; Barth, S.; Staudt, A.; Kroemer, H.-K.; Dahm, J. B.; Felix, S. B.; Landsberger, M.
CS Department of Internal Medicine B, Ernst Moritz Arndt University, Greifswald, Germany
SO Journal of Physiology and Pharmacology (2007), 58(3), 503-514
CODEN: JPHPEI; ISSN: 0867-5910
PB Polish Physiological Society
DT Journal
LA English
AB Endothelial dysfunction and atherosclerosis are associated with an inflammation-induced decrease in endothelial nitric oxide synthase (eNOS) expression. Based on the differences between hydrophobic and hydrophilic statins in their reduction of cardiac events, we analyzed the effects of rosuvastatin and cerivastatin on eNOS and inducible NO synthase (iNOS) expression and NOS activity in TNF-α-stimulated human umbilical vein endothelial cells (HUVEC). Both statins reversed down-regulation of eNOS mRNA and protein expression by inhibiting HMG-CoA reductase and isoprenoid synthesis. Cerivastatin tended to a more pronounced effect on eNOS expression compared to rosuvastatin. NOS activity - measured by conversion of [3H]-L-arginine to [3H]-L-citrulline - was enhanced under treatment with both drugs due to inhibition of HMG-CoA reductase. Statin-treatment reduced iNOS mRNA expression under normal conditions, but had no relevant effects on iNOS mRNA expression in cytokine-treated cells. Rosuvastatin and cerivastatin reverse the detrimental effects of TNF-α-induced down-regulation in eNOS protein expression and increase NO synthase activity by inhibiting HMG-CoA reductase and subsequent blocking of isoprenoid synthesis. These results provide evidence that statins have beneficial effects by increasing eNOS expression and activity during the atherosclerotic process.
RE.CNT 20 THERE ARE 20 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 22 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1204292 CAPLUS
DN 147:495615
TI Rosuvastatin zinc salt
IN Vago, Pal; Simig, Gyula; Clementis, Gyoergy; Toempe, Peter; Tapai, Sandorne
PA Egis Gyogyszergyar Nyrt., Hung.
SO PCT Int. Appl., 31pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

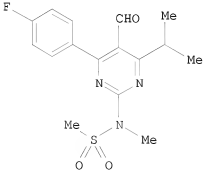
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007119085	A1	20071025	WO 2007-HU30	20070412
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BH, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, MT, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	HU 2006000293	A2	20071228	HU 2006-293	20060413
	HU 2006000293	A3	20080428		
PRAI	HU 2006-293	A	20060413		

OS MARPAT 147:495615
AB The present invention is related to rosuvastatin Zn salt, the process for preparation thereof and medicinal products containing said salt. Rosuvastatin Zn salt according to the present invention was prepared by reacting rosuvastatin with a Zn alcoholate, Zn enolate or an inorg. or organic Zn salt and isolating the thus obtained rosuvastatin Zn salt (2:1).
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

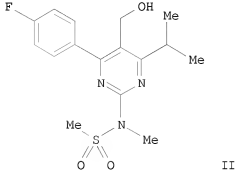
L4 ANSWER 23 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:1011243 CAPLUS
DN 149:32321
TI Process for preparing 4-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidinecarbaldehyde and use thereof
IN Radl, Stanislav; Stach, Jan
PA Zentiva, A. S., Czech Rep.
SO Czech Rep., 7pp.
CODEN: CZXXED
DT Patent
LA Czech
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI CZ 298330	B6	20070829	CZ 2004-821	20040719
PRAI CZ 2004-821		20040719		

OS CASREACT 149:32321
GI



I



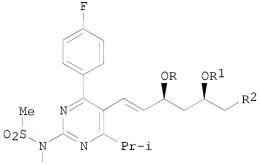
II

AB In the present invention, there is disclosed a process for preparing 4-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidinecarbaldehyde I wherein the preparation process is characterized by oxidizing [4-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidin-5-yl]methanol II in the presence of a catalytic amount of a nitroxyl radical-containing agent, preferably 2,2,6,6-tetramethylpiperidin-1-oxyl or 4-acetamido-2,2,6,6-tetramethylpiperidin-1-oxyl. So prepared compound I is then used for the preparation of rosuvastatin.

L4 ANSWER 24 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:998708 CAPLUS
DN 147:322770
TI Process for preparing rosuvastatin calcium
IN Patel, Dhimant Jasubhai; Kumar, Rajiv; Dwivedi, Shri Prakash Dhar
PA Cadila Healthcare Limited, India
SO PCT Int. Appl., 19pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007099561	A1	20070907	WO 2007-IN83	20070226
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	IN 2006MU00271	A	20071026	IN 2006-MU271	20060227
PRAI	IN 2006-MU271	A	20060227		

OS CASREACT 147:322770
GI



I

AB A process was disclosed for the preparation of highly pure amorphous rosuvastatin calcium I (R = R1 = H, R2 = CO2-.1/2Ca2+) substantially free of impurities as determined by HPLC. The process comprised deprotection of acetonide ester I (RR1 = CMe2, R2 = CO2CMe3) in MeOH using oxalic acid in H2O followed by treatment of the resulting diol ester I (R = R1 = H, R2 = CO2CMe3) with NaOH and H2O and HPLC to give the desired rosuvastatin calcium with ≥ 99.65% purity.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

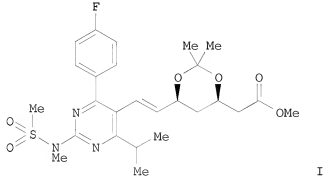
L4 ANSWER 25 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:846111 CAPLUS
DN 147:219926
TI Manufacturing rosuvastatin potassium
IN Patel, Dhimant Jasubhai; Kumar, Rajiv; Agarwal, Virendra Kumar
PA Cadila Healthcare Limited, India
SO PCT Int. Appl., 15pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007086082	A2	20070802	WO 2007-IN37	20070125
	WO 2007086082	A3	20070920		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW

RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRAI IN 2006-MU1217 A 20060130
OS CASREACT 147:219926; MARPAT 147:219926
GI



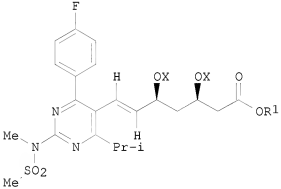
I

AB A process of manufacturing of Rosuvastatin potassium is disclosed. The process comprises the steps of treating Rosuvastatin protected compound (I) with an HCl and then KOH in methanol to form Rosuvastatin potassium and then isolation.

L4 ANSWER 26 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:844109 CAPLUS
DN 147:235189
TI Process for preparation of statins with high syn to anti ratio
IN Niddam-Hildesheim, Valerie; Balanov, Anna; Chen, Kobi
PA Israel
SO U.S. Pat. Appl. Publ., 13pp., Cont.-in-part of U.S. Ser. No. 20,834.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070179166	A1	20070802	US 2006-520295	20060912
	US 20050159615	A1	20050721	US 2004-20834	20041223
	JP 2008031168	A	20080214	JP 2007-191419	20070723
PRAI	US 2003-532458P	P	20031224		
	US 2004-547715P	P	20040224		
	US 2004-20834	A2	20041223		
	US 2005-716802P	P	20050912		
	JP 2006-545612	A3	20041223		

OS CASREACT 147:235189; MARPAT 147:235189
GI



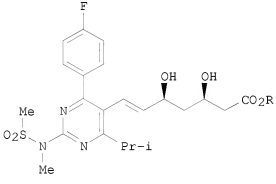
I

AB Provided is a process for reduction of statin keto esters and purification of diol esters of the statins through selective crystallization A process for preparing rosuvastatin diol ester by reduction of I wherein R1 is (un)branched C1-4 alkyl; at least one of X is forms a double bond to give a ketone and at most one X is H; are claimed. Rosuvastatin diol ester I (R1 is t-Bu; X is H) was obtained by reduction of the keto ester derivative with B-methoxy-9-BBN and borohydride. High syn to anti ratio was obtained by crystallization of the diol.

L4 ANSWER 27 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:793741 CAPLUS
DN 147:166109
TI Preparation of rosuvastatin
IN Balanov, Anna; Shenkar, Natalia; Niddam-Hildesheim, Valerie
PA Israel
SO U.S. Pat. Appl. Publ., 23pp., Cont.-in-part of U.S. Ser. No. 360,725.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20070167625	A1	20070719	US 2006-543357	20061004
	US 20070037979	A1	20070215	US 2006-360725	20060222
PRAI	US 2005-655580P	P	20050222		
	US 2005-676388P	P	20050428		
	US 2005-723491P	P	20051003		
	US 2005-723875P	P	20051004		
	US 2005-732979P	P	20051102		
	US 2005-751079P	P	20051215		
	US 2006-760506P	P	20060119		
	US 2006-762348P	P	20060125		
	US 2006-360725	A2	20060222		

OS CASREACT 147:166109; MARPAT 147:166109
GI



I

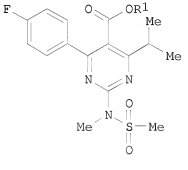
AB Processes were disclosed for the preparation of the cholesterol-lowering agent rosuvastatin I (R = H), rosuvastatin salts, such as I (R = 1/2Ca), and synthetic intermediates thereof.

L4 ANSWER 28 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:729065 CAPLUS
DN 147:143455
TI Preparation of alkyl 4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfony)amino]pyrimidine-5-carboxylate and its subsequent conversion to N-[4-(4-fluorophenyl)-5-formyl-6-isopropylpyrimidin-2-yl]-N-methylmethanesulfonamide - a key intermediate in the synthesis of rosuvastatin
IN Khamar, Bakulesh Mafatlal; Modi, Indravadan Ambalal; Venkatraman, Jayaraman; Ravi, Ponnaiah; Desai, Sanjay Jagadish; Rajput, Amarsingh L.
PA Khamar, Bakulesh, Mafatlal, India; Modi, Indravadan, Ambalal; Desai, Sanjay, Jagadish; Rajput, Amarsingh, L.
SO PCT Int. Appl., 21 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

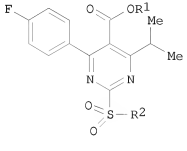
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2007074391	A2	20070705	WO 2006-IB3791	20061228
WO 2007074391	A3	20080626		

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW
RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA

PRAI IN 2005-MU1632 A 20051228
OS CASREACT 147:143455; MARPAT 147:143455
GI



I



II

AB The present invention discloses a novel process to prepare sulfonamide compound of formula I (R1 = C1-C6 alkyl, R2 = C1-C8 alkyl, cycloalkyl, Ph, CH2Ph, substituted Ph). Sulfonyl ester II was prepared and reacted with N-methylmethanesulfonamide sodium salt in DMF, giving I. I then underwent reduction to the alc. and treatment with calcium hypochloride in CH2Cl2 to give the desired aldehyde intermediate for

rosuvastatin.

L4 ANSWER 29 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:508947 CAPLUS
DN 147:31227
TI Process for preparation of methyl 3(R)-(tert-butyldimethylsilyloxy)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]-5-pyrimidinyl]-5-oxo-6(E)-heptenoate as rosuvastatin calcium intermediate
IN Yuan, Zhedong; Yang, Yulei
PA Shanghai Institute of Pharmaceutical Industry, Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 12pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

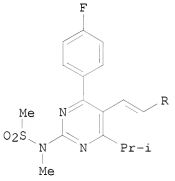
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1958593	A	20070509	CN 2005-10110022	20051103
PRAI	CN 2005-10110022		20051103		

OS CASREACT 147:31227
AB This invention provides a process for the preparation of Me 3(R)-(tert-butyldimethylsilyloxy)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]-5-pyrimidinyl]-5-oxo-6(E)-heptenoate, which is an useful intermediate for synthesis of rosuvastatin calcium. For example, 4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]-5-pyrimidinecarboxylic acid Et ester was reduced with potassium borohydride, followed by oxidation with K2Cr2O7/H2SO4 and addition of Me 3(R)-(tert-butyldimethylsilyloxy)-6-dimethoxyphosphinyl-5-oxohexanoate to give the title compound in moderate yield. The process has the advantages of cheap raw material, mild reaction conditions, short reaction time, and greatly increased yield.

L4 ANSWER 30 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:493009 CAPLUS
DN 148:284938
TI Process for preparation of statins and novel intermediates thereof
AU Rafeeq, Mohammad; De, Shantanu; Sathyanarayana, Swargam
CS Ranbaxy Laboratories Limited, Haryana, 122001, India
SO IP.com Journal (2007), 7(2B), 8 (No. IPCOM000146174D), 6 Feb 2007
CODEN: IJPOBX; ISSN: 1533-0001
PB IP.com, Inc.
DT Journal; Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IP 146174D		20070206	IP 2007-146174D	20070206
PRAI	IP 2007-146174D		20070206		

OS CASREACT 148:284938
GI



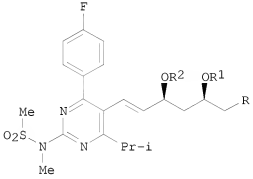
I

AB A novel process was disclosed for the preparation of statins and novel intermediates thereof. The present disclosure in particular provides a process for the preparation of rosuvastatin and fluvastatin using novel intermediates, such as I [R = CO2Et, CH2OH, CHO, CH(OH)CH2COCH2CO2CMe3, CH(OH)CH2CH(OH)CH2CO2CMe3].

L4 ANSWER 31 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:492769 CAPLUS
DN 147:365317
TI Process for preparing rosuvastatin calcium in amorphous form
IN Vakil, Manish H.; Patel, Dhimant J.; Rupapara, Mahesh L.; Bhimani, Girish H.; Sutariya, Prakash M.; Kumar, Agarwal Virendra
PA Cadila Healthcare Limited, India
SO Indian Pat. Appl., 13pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2004MU00459	A	20070427	IN 2004-MU459	20040415
PRAI IN 2004-MU459		20040415		

OS CASREACT 147:365317
GI



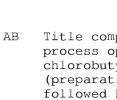
I

AB A one-pot process was disclosed for the preparation of the pharmaceutically useful rosuvastatin calcium I (R = CO2-.1/2Ca2+, R1 = R2 = H) in amorphous form. The process comprised hydrolysis of acetonide ester I (R = CO2CMe3, R1R2 = CMe2) with 1.0 N hydrochloric acid in aqueous methanol, conversion of the resulting diol acid I (R = CO2H, R1 = R2 = H) to corresponding sodium salt I (R = CO2-.Na+, R1 = R2 = H) using a suitable base and solvent combination, and finally, treatment of the solution of resulting sodium salt with calcium chloride solution to obtain the desired amorphous from of rosuvastatin calcium.

L4 ANSWER 32 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:410688 CAPLUS
DN 146:421841
TI Process for the preparation of statins and tetrahydropyranone intermediates.
IN Zdenko, Casar
PA Lek Pharmaceuticals D.D., Slovenia
SO PCT Int. Appl., 66pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007039287	A1	20070412	WO 2006-EP9599	20061004
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1775299	A1	20070418	EP 2005-21706	20051005
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	AU 2006299018	A1	20070412	AU 2006-299018	20061004
	CA 2624471	A1	20070412	CA 2006-2624471	20061004
	EP 1937696	A1	20080702	EP 2006-806036	20061004
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	MX 200804507	A	20080421	MX 2008-4507	20080404
PRAI	EP 2005-21706	A	20051005		
	WO 2006-EP9599	W	20061004		

OS MARPAT 146:421841
GI



I

AB Title compds. (I; X = halo; R1 = protecting group) were prepared in a 6-step process optionally starting from alkyl 3(S)-hydroxy-4-chlorobutyrates. Thus, (R)-3-(tert-butyldimethylsilyloxy)-5-hexenoic acid (preparation given) and NaHCO3 in MeCN at 0° was treated with I2 followed by stirring for 4 h to give 97% of a 77:23 mixture of (4R,6S)- and (4R,6R)-4-(tert-butyldimethylsilyloxy)-6-iodomethyltetrahydropyran-2-one. The (4R,6S)-isomer was isolated by HPLC or 7-fold recrystn. and elaborated

to Rosuvastatin Ca salt.
RE.CNT 12 THERE ARE 12 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 33 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:409240 CAPLUS
DN 146:402001
TI Process for producing rosuvastatin
IN Balanov, Anna; Shenkar, Natalia; Niddam-Hildesheim, Valerie
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 47pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007041666	A1	20070412	WO 2006-US38921	20061004
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SV, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	US 20070037979	A1	20070215	US 2006-360725	20060222
	CA 2625290	A1	20070412	CA 2006-2625290	20061004
	EP 1831182	A1	20070912	EP 2006-816290	20061004
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2008521836	T	20080626	JP 2007-543631	20061004
	MX 200706647	A	20070725	MX 2007-6647	20070601
	KR 2007085701	A	20070827	KR 2007-712545	20070601
	IN 2008DN02977	A	20080808	IN 2008-DN2977	20080410
PRAI	US 2005-723875P	P	20051004		
	US 2005-732979P	P	20051102		
	US 2005-751079P	P	20051215		
	US 2006-760506P	P	20060119		
	US 2006-762348P	P	20060125		
	US 2006-360725	A	20060222		
	US 2005-655580P	P	20050222		
	US 2005-676388P	P	20050428		
	US 2005-723491P	P	20051003		
	WO 2006-US38921	W	20061004		

OS CASREACT 146:402001; MARPAT 146:402001
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Process for the preparation of compound I [W = carboxyl protecting group; X = hydroxy protecting group], characterized by Wittig-Horner reaction of compound II [T1, T2 = aryl, alkoxy; W, X = same as above] with a base and compound III, was provided. Thus, to a solution of compound II [T1, T2

= OEt; X = tert-butyldimethylsilyl; CW = tert-butoxycarbonyl] (100.0 g) in THF (500 mL) was added potassium tert-butoxide (24.7 g) in 3 portions while keeping the temperature below 10° and the reaction was stirred for 15 min. The resulting reaction mixture was treated with compound III (51.0 g) at 0-2° for 2 h, allowed to reach ambient temperature and further stirred for 16-18 h to give compound I [CW = tert-butoxycarbonyl; X = tert-butyldimethylsilyl] (83.2 g), which was converted into rosuvastatin calcium salt in 3 steps.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 34 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:403836 CAPLUS
DN 147:44930
TI Focus on the statin research: drug metabolism and transporter profiles of statins
AU Fujino, Hideki; Kojima, Junji
CS New Drug Research Laboratories, Kowa Company Ltd., Tokyo, Japan
SO Focus on Statin Research (2006), 109-137. Editor(s): Wong, B. A. Publisher: Nova Science Publishers, Inc., Hauppauge, N. Y.
CODEN: 69JCMW; ISBN: 1-59454-617-7
DT Conference; General Review
LA English
AB A review. The cause of drug-drug interaction is considered to be as follows: the absorption, distribution, excretion and metabolism of medicines are inhibited by the drugs administered concomitantly. The processes involved in metabolic biotransformation, especially those mediated by CYP and UGT, are recognized as a major factor determining the metabolic fate of statins.
UGTs are principally responsible for the glucuronidation of statins leading to lactonization. On the other hand, a remarkable increase in metabolic clearance is noted for all lactones compared with all acids. The metabolic clearance of the lactone for atrovastatin, simvastatin and rosuvastatin was about 70-fold higher than that of the corresponding acid. Also, CYP2Cs were critically involved in the metabolism of cerivastatin, fluvastatin and pitavastatin acid forms. In contrast, CYP2Cs were not involved in the metabolism of the corresponding lactones and instead, CYP3A4 was mainly involved. Moreover, a substantial difference in the metabolic inhibition of statins was found between acids and lactones. These results demonstrate that the acid and lactone forms differ in their metabolic properties. Taking these results into consideration, the metabolism of lactone forms clearly will need to be taken into account when assessing mechanistic aspects of drug-drug interactions involving statins. The role and importance of active carrier systems in the transport of drugs across biol. membranes are now well recognized. An organic anion transporter, OATP2, is critically involved in the uptake of several statins into hepatocytes. Since pravastatin, rosuvastatin and pitavastatin can not undergo metabolism via CYPs, the frequency of drug-drug interaction was believed to be low. However, plasma concns. of these statins increase after the co-administration of cyclosporine. Several researchers reported that cyclosporine inhibited the OATP2-mediated uptake of statins. These results indicate that transporter-mediated inhibition may be an addnl. reason for the clin. interaction of statins with other medicines. Since renal excretion is a minor pathway for the elimination of statins, little impact would be anticipated in patients with renal insufficiency. However, it is essential to know the influence on the pharmacokinetics in special populations such as patients with liver dysfunction and genetic polymorphisms. Remarkable increases in the plasma concns. of statins have been reported in patients with Child-Pugh B liver dysfunction. Moreover, the OATP2*15 allele was associated with an increased plasma concentration of pravastatin. The reduced hepatic clearance associated with a lower hepatic concentration and/or a higher plasma concentration, resulted in an attenuation of the lipid-lowering effect or increase in the risk of statin-mediated rhabdomyolysis. On the basis of pharmacokinetic changes of statins, caution is required in patients within these populations. In conclusion, to elucidate the process responsible for the elimination of statins from the systemic circulation, the characterization of CYPs and transporters needs to be taken into account to avoid interactions with statins.

RE.CNT 133 THERE ARE 133 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 35 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:396833 CAPLUS
DN 148:239236
TI Novel process for the preparation of (+)-(3r,5s)-7-(4-fluorophenyl)-6-isopropyl-2-(N-methyl-N-methanesulfonylamino)pyrimidin-5-yl]-3,5-dihydroxy-6-(E)-heptenoic acid calcium salt(2:1)
IN Reddy, Manne Satyanarayana; Kumar, Muppa Kishore; Rajan, Srinivasan Thirumalai; Reddy, Maram Reddy Sahadeva
PA India
SO Indian Pat. Appl., 23pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2005CH00782	A	20060818	IN 2005-CH782	20050622
PRAI IN 2005-CH782		20050622		

OS CASREACT 148:239236
AB A process for the preparation of (+)-(3R,5S)-7-[4-(4-Fluorophenyl)-6-isopropyl- 2-(N-Me-N-methanesulfonylamino)pyrimidin -5-yl]-3,5-dihydroxy-6-(E)-heptenoic acid calcium salt (2:1), also known as rosuvastatin calcium. The process for the preparation rosuvastatin calcium involved olefination reaction, addition reactions, and hydrolysis.

L4 ANSWER 36 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:391367 CAPLUS
DN 148:17768
TI Oral pharmaceutical compositions of synthetic lipid lowering agents and a process of preparation thereof
IN Pravinchandra, Mehta Bharat; Shah, Rajen; Mansukhlal, Doshi Madhukant
PA M/S. J.B.Chemicals & Pharmaceuticals Ltd., India
SO Indian Pat. Appl., 13pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

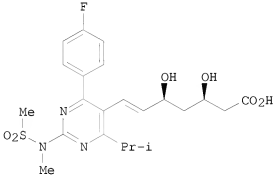
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 2004MU01390	A	20060721	IN 2004-MU1390	20041222
PRAI IN 2004-MU1390		20041222		

AB The present invention describes a pharmaceutical compns. for oral administration comprising of synthetic lipid lowering agents which have improved stability in acidic environments. The process of manufacturing of such pharmaceutical composition is also disclosed in the present invention.

L4 ANSWER 37 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:272349 CAPLUS
DN 148:214858
TI Process for preparation of statins and novel intermediates thereof
AU Anon.
CS USA
SO IP.com Journal (2007), 7(2A), 6 (No. IPCOM000145623D), 19 Jan 2007
CODEN: IJPOBX; ISSN: 1533-0001
PB IP.com, Inc.
DT Journal; Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IP 145623D		20070119	IP 2007-145623D	20070119
PRAI IP 2007-145623D		20070119		

OS CASREACT 148:214858
GI



I

AB A novel process was disclosed for the preparation of statins, such as rosuvastatin (I) and fluvastatin, and novel intermediates thereof.

L4 ANSWER 38 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:249678 CAPLUS
DN 148:85829
TI A process for the producing pharmaceutical formulations of lipophilic compounds in lipid form
IN Patel, Dinesh Shantilal; Kurani, Shashikant Prabhudas
PA India
SO Indian Pat. Appl., 28pp.
CODEN: INXXBQ
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	IN 2003MU00546	A	20050715	IN 2003-MU546	20030528
PRAI	IN 2003-MU546		20030528		

AB A process for the manufacture of stable pharmaceutical formulations involving various actives such as lipophilic compds. in the form of limpid solns. and a selective solubilizing agent which would be non-toxic and a good carrier for permeation of the active drugs thereby favoring for wide and user friendly application of the drug for various end uses especially as injectable including i.v. and i.m., oral and external agents. The process involves a selective solubilizing agent comprising 2,5-di-O-methyl-1-4,3-6-dianhydro-D-glucitol. The process would avoid the problems and limitations in the use of oils and derivs. of emulsions in providing such soluble forms of various actives/drugs. Importantly, the process is directed to various categories of drugs of a desired quality control, free of problems of toxicity of the solvent.

L4 ANSWER 39 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:204569 CAPLUS
DN 146:330422
TI Rationale and design for a study using intravascular ultrasound to evaluate effects of rosuvastatin on coronary artery atheroma in Japanese subjects - COSMOS study (coronary atherosclerosis study measuring effects of rosuvastatin using intravascular ultrasound in Japanese subjects)
AU Takayama, Tadateru; Hiro, Takafumi; Yamagishi, Masakazu; Daida, Hiroyuki; Saito, Satoshi; Yamaguchi, Tetsu; Matsuzaki, Masunori
CS Division of Cardiovascular Medicine, Department of Medicine, Nihon University School of Medicine, Tokyo, Japan
SO Circulation Journal (2007), 71(2), 271-275
CODEN: CJIOBY; ISSN: 1346-9843
PB Japanese Circulation Society
DT Journal
LA English
AB Background: There have been few multicenter studies using intravascular ultrasound (IVUS) to assess the process of atherosclerosis in a Japanese population with hypercholesterolemia that is being treated with 3-hydroxy-3-methylglutaryl CoA reductase inhibitors for control of low-d. lipoprotein-cholesterol. Methods and Results: An open-label multicenter study is planned to evaluate with IVUS whether treatment with rosuvastatin for 76 wk results in regression of coronary artery atheroma volume in patients who have coronary heart disease (CHD) and hypercholesterolemia. Sample size is 200 subjects with CHD who are to undergo percutaneous coronary intervention. The planned duration is between Oct. 2005 and Oct. 2008. Conclusions: The COSMOS study will be the first multicenter cardiovascular study in a Japanese population and may provide new evidence on the effects of rosuvastatin on the progression of coronary atherosclerotic lesions.
RE.CNT 23 THERE ARE 23 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 40 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:173706 CAPLUS
DN 146:251655
TI Process for the synthesis of rosuvastatin calcium using L-malic acid for the side chain chirality
IN Zlicar, Marko
PA Lek Pharmaceuticals D.D., Slovenia
SO PCT Int. Appl., 63pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007017117	A1	20070215	WO 2006-EP7388	20060726
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	SI 22166	A	20070630	SI 2005-311	20051110
	EP 1912953	A1	20080423	EP 2006-762830	20060726
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
PRAI	SI 2005-220	A	20050728		
	SI 2005-311	A	20051110		
	WO 2006-EP7388	W	20060726		

OS CASREACT 146:251655; MARPAT 146:251655
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB Present invention represents process for the preparation of HMG-CoA reductase inhibitors, in particular rosuvastatin calcium (I·1/2 Ca2+) introducing L-malic acid as the source of chirality for the side chain. The process for preparing statins II [R4 = protecting group; R5 = C1-12-alkyl, C3-9-cycloalkyl, C2-8-alkenyl, C5-6-cycloalkenyl, C5-10-aryl, heteroaryl, optionally substituted with halogen, alkyl, alkoxy, aryl; Het = Het1, Het2, Het3, Het4, Het5, Het6; dashed line = single or double bond] comprises reacting Het-CH2P+R1R2R3 A- [R1, R2, R3 = C1-12-alkyl, C3-9-cycloalkyl, C2-8-alkenyl, C5-6-cycloalkenyl, C5-10-aryl, heteroaryl, optionally substituted with halogen, alkyl, alkoxy, aryl; A = anion of a strong anion with a pKa < 4] or Het-CH2P(:O)R2'R3' [R2', R3' = C1-12-alkyl, C3-9-cycloalkyl, C2-8-alkenyl, C5-6-cycloalkenyl, C5-10-aryl, heteroaryl, optionally substituted with halogen, alkyl, alkoxy, aryl] with chiral aldehyde III. Thus, I was prepared from L-malic acid via esterification, silylation, red. with Dibal-H in CH2Cl2 containing MgBr2·OEt2, Wittig reaction with [[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidi-5-yl]methyl]methyldiphenylphosphonium bromide in THF containing NaN(SiMe3)2,

condensation with LiCH2CO2CMe3 in THF, stereoselective reduction with NaBH4 in THF/MeOH containing Et2BOMe, saponification with NaOH in aqueous THF followed by precipitation with aqueous CaCl2.

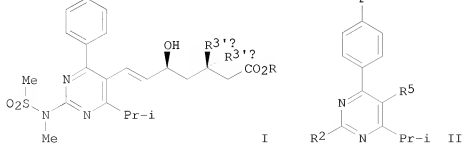
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 41 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:127721 CAPLUS
DN 146:350962
TI Rosuvastatin Affecting Aortic Valve Endothelium to Slow the Progression of Aortic Stenosis
AU Moura, Luis M.; Ramos, Sandra F.; Zamorano, Jose L.; Barros, Isabel M.; Azevedo, Luis F.; Rocha-Goncalves, Francisco; Rajamannan, Nalini M.
CS Hospital Pedro Hispano, Matosinhos, Port.
SO Journal of the American College of Cardiology (2007), 49(5), 554-561
CODEN: JACCDI; ISSN: 0735-1097
PB Elsevier Inc.
DT Journal
LA English
AB Objectives: The objective of this study was to test the effect of a 3-hydroxy-3-methylglutaryl CoA (HMG CoA) reductase inhibitor on the progression of moderate to severe aortic stenosis as measured by echocardiog. Background: Recent retrospective studies support the hypothesis that statins slow the progression of aortic stenosis. Methods: We performed an open-label, prospective study evaluating 121 consecutive patients with asymptomatic moderate to severe aortic stenosis (aortic valve area ≥ 1.0 cm2; mean age 73.7 ± 8.9 years; 57 men and 64 women), treated with and without rosuvastatin according to the National Cholesterol Education Program Adult Treatment Panel III guidelines. Echocardiog., serum lipid, and inflammatory markers were measured at baseline and every 6 mo for 18 mo. Results: Sixty-one patients (50.4%) with elevated LDL (159.7 ± 33.4 mg/dL), aortic valve velocity (3.65 ± 0.64 m/s), and aortic valve area (1.23 ± 0.42 cm2) received rosuvastatin (20 mg/day), and 60 (49.6%) with a normal LDL (118.6 ± 37.4 mg/dL), aortic valve velocity (3.62 ± 0.61 m/s), and aortic valve area (1.20 ± 0.35 cm2) received no statin. During a mean follow-up of 73 ± 24 wk, the change in aortic valve area in the control group was -0.10 ± 0.09 cm2/yr vs. -0.05 ± 0.12 cm2/yr in the rosuvastatin group (p = 0.041). The increase in aortic valve velocity was 0.24 ± 0.30 m/s/yr in the control group and 0.04 ± 0.38 m/s/yr in the rosuvastatin group (p = 0.007). There was significant improvement in serum lipid and echocardiog. measures of aortic stenosis in the statin group. Conclusions: Prospective treatment of aortic stenosis with rosuvastatin by targeting serum LDL slowed the hemodynamic progression of aortic stenosis. This is the first prospective study that shows a pos. effect of statin therapy for this disease process.
RE.CNT 44 THERE ARE 44 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 42 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2007:61204 CAPLUS
DN 146:142423
TI Processes for the manufacture of rosuvastatin and intermediates
IN Butters, Michael; Cox, David Kenneth; Crabb, Jeffrey Norman; Lenger, Steven Robert; Murray, Paul Michael; Snape, Evan William
PA Astrazeneca UK Limited, UK
SO PCT Int. Appl., 37pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2007007119	A1	20070118	WO 2006-GB3543	20060703
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2006268024	A1	20070118	AU 2006-268024	20060703
	CA 2614281	A1	20070118	CA 2006-2614281	20060703
	EP 1904456	A1	20080402	EP 2006-779538	20060703
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	NO 2007006660	A	20080109	NO 2007-6660	20071228
	IN 2008DN00055	A	20080711	IN 2008-DN55	20080102
	CN 101218210	A	20080709	CN 2006-80024717	20080107
	MX 200800362	A	20080307	MX 2008-362	20080108
	KR 2008024538	A	20080318	KR 2008-701929	20080124
PRAI	GB 2005-14078	A	20050708		
	WO 2006-GB3543	W	20060703		

OS CASREACT 146:142423; MARPAT 146:142423
GI



AB A stereoselective aldol process was disclosed for the enantioselective preparation of esters, such as I [R = alkyl, cycloalkyl,

arylalkyl; R3'aR3'b = O], which are useful intermediates for the synthesis of rosuvastatin I [R = R3'a = H, R3'b = OH]. Thus, rosuvastatin intermediate β-oxo ester I [R = Et, R3'aR3'b = O] was prepared via a condensation reaction with 70% yield of bromide II [R2 = N(Me)SO2Me, R5 = Br] with H2C:CHCN using TBAB, Pd[P(CMe3)3]2, and dicyclohexylmethylamine in toluene to give trans-cyanovinyl derivative II [R2 = N(Me)SO2Me, R5 = CH:CHCN-(E)], conversion with 76% yield of the resulting cyanovinyl derivative to the corresponding aldehyde II [R2 = N(Me)SO2Me, R5 = CH:CHCHO-(E)] using DIBAL in toluene, and finally, an aldol reaction of the resulting aldehyde with H2C:C(OSiMe3)CH:C(OEt)OSiMe3 using (S)-(-)-[(1S)-[1,1'-binaphthalene]-2,2'-diolato(2-)-κO,κO']bis(2-propanolato)titanium, Me2N(CH2)2NMe2 and LiCl in THF. The intermediate β-oxo ester was then reduced using NaBH4 and diethylmethoxyborane in MeOH and THF to give the diol I [R = Et, R3'a = H, R3'b = OH] and the resulting diol was further converted to rosuvastatin calcium I [R = 1/2Ca, R3'a = H, R3'b = OH].

L4 ANSWER 43 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1357044 CAPLUS
DN 146:100718
TI Process for preparing amorphous rosuvastatin calcium free of impurities
IN Casar, Zdenko; Zlicar, Marko
PA Lek Pharmaceuticals D.D., Slovenia
SO PCT Int. Appl., 42pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006136407	A1	20061228	WO 2006-EP6007	20060622
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2006261087	A1	20061228	AU 2006-261087	20060622
	CA 2612587	A1	20061228	CA 2006-2612587	20060622
	EP 1912952	A1	20080423	EP 2006-754501	20060622
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	IN 2007DN09216	A	20080118	IN 2007-DN9216	20071129
	CN 101208307	A	20080625	CN 2006-80022852	20071224
	IN 2007CN05942	A	20080627	IN 2007-CN5942	20071224
PRAI	SI 2005-188	A	20050624		
	WO 2006-EP6007	W	20060622		

OS MARPAT 146:100718
AB The invention discloses an amorphous form of rosuvastatin calcium having purity > 99.9% as determined by HPLC area percentage and free from any traces of alkali metal impurities. A process for preparing pure amorphous rosuvastatin calcium comprises hydrolysis of C1-C5 alkyl esters of rosuvastatin, preferably the tert-Bu ester of rosuvastatin, with an organic nitrogen base (e.g., guanidines, amidines, amines and quaternary ammonium hydroxides) in the presence of water optionally containing an aprotic solvent, followed by treatment of the organic salt with a source of calcium. Rosuvastatin calcium is an HMG CoA reductase, useful in the treatment of hyperlipidemia, hypercholesterolemia and atherosclerosis. Examples include the hydrolysis of rosuvastatin in aqueous solution of amines and the preparation of various ammonium salts of rosuvastatin.
RE.CNT 13 THERE ARE 13 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 44 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1356819 CAPLUS
DN 146:100716
TI Process for preparing pure amorphous rosuvastatin calcium
IN Casar, Zdenko; Zlicar, Marko
PA Lek Pharmaceuticals D.D., Slovenia
SO PCT Int. Appl., 26pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006136408	A2	20061228	WO 2006-EP6008	20060622
	WO 2006136408	A3	20070419		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HN, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RS, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	AU 2006261088	A1	20061228	AU 2006-261088	20060622
	CA 2611920	A1	20061228	CA 2006-2611920	20060622
	EP 1915349	A2	20080430	EP 2006-754502	20060622
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	CN 101203496	A	20080618	CN 2006-80022673	20071224
	IN 2007CN05944	A	20080627	IN 2007-CN5944	20071224
	US 20080188504	A1	20080807	US 2008-916599	20080107
PRAI	SI 2005-187	A	20050624		
	WO 2006-EP6008	W	20060622		

AB A new process for preparing pure amorphous rosuvastatin calcium, substantially free of impurities, is disclosed. A process comprising hydrolyzing a C1 to C5 alkyl ester of rosuvastatin, preferably Me rosuvastatin or tert-Bu rosuvastatin, with a base, e.g. sodium hydroxide, in the presence of an aprotic solvent, preferably THF and N,N-dimethylacetamide, or in the presence of a mixture of an aprotic solvent and water, to obtain a solution of rosuvastatin salt, which may be converted to another rosuvastatin salt using another cation, e.g. with calcium cation to obtain rosuvastatin calcium. Rosuvastatin amine salts may be obtained as well. In another preferred aspect of the invention rosuvastatin free acid may be converted to various rosuvastatin salts, e.g. to rosuvastatin calcium, rosuvastatin sodium or various rosuvastatin amine salts, including rosuvastatin solvates, e.g. rosuvastatin calcium hydrate. Rosuvastatin calcium is useful in the treatment of hyperlipidemia, hypercholesterolemia and atherosclerosis. Thus, hydrolysis of rosuvastatin tert-Bu ester in THF and water containing NaOH, followed by treatment of the aqueous solution of the rosuvastatin sodium salt with calcium chloride, gave amorphous rosuvastatin calcium salt.

L4 ANSWER 45 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1329897 CAPLUS
DN 146:121975
TI Process for preparation of tert-Bu [(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate
IN Chen, Zhirong; Wang, Zhihua; Yan, Jianbo
PA Zhejiang Neo-Dankong Pharmaceutical Co., Ltd., Peop. Rep. China; Zhejiang University
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 14pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1876644	A	20061213	CN 2006-10052219	20060630
PRAI	CN 2006-10052219		20060630		

OS CASREACT 146:121975
AB This invention provides a process for the preparation of tert-Bu [(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate, which is an useful intermediate for synthesizing rosuvastatin. For example, (3S)-3-hydroxy-4-[[(4-methylphenyl)sulfonyl]oxy]butanenitrile was reacted with tert-Bu bromoacetate, followed by reduction with potassium borohydride, addition of 2,2-dimethoxypropane to give, and deprotection in methanol in the presence of sodium methoxide to give tert-Bu [(4R,6S)-6-hydroxymethyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate. The intermediate obtain in the previous step was reacted with oxalyl chloride and DMSO in dichloromethane in the presence of triethylamine to give the title [(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate. The process has the advantages of high purity, simple operation, and high yield.

L4 ANSWER 46 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1280988 CAPLUS
DN 146:45535
TI Process for the preparation of n-[4-(4-fluorophenyl)-5-formyl-6-isopropyl-pyrimidin-2-yl]-N-methylmethanesulfonamide
IN Grumann, Arne; Pietikaeinen, Pekka; Reine, Inese
PA Fermion Oy, Finland
SO PCT Int. Appl., 20pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

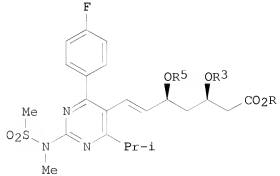
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006128954	A1	20061207	WO 2006-FI170	20060531
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1893585	A1	20080305	EP 2006-755392	20060531
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
PRAI	FI 2005-586	A	20050601		
	US 2005-685890P	P	20050601		
	WO 2006-FI170	W	20060531		

OS MARPAT 146:45535
AB A process for the preparation of N-[4-(4-fluorophenyl)-5-formyl-6-isopropylpyrimidin-2-yl]-N-methylmethanesulfonamide is presented. The title compound is a useful synthon toward the preparation of rosuvastatin or pharmaceutically related derivs.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 47 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1253106 CAPLUS
DN 146:7754
TI Process for the preparation of rosuvastatin by new intermediates
IN Fischer, Janos; Szemzoe, Attila; Vukics, Krisztina; Erdelyi, Peter; Szoeke, Katalin; Donat, Andrea
PA Richter Gedeon Vegyeszeti Gyar Rt., Hung.
SO PCT Int. Appl., 24pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006126035	A2	20061130	WO 2006-HU49	20060526
	WO 2006126035	A3	20070614		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	HU 2005000537	A2	20070502	HU 2005-537	20050526
	HU 2005000537	A3	20080428		
	EP 1902036	A2	20080326	EP 2006-744403	20060526
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR, YU				
PRAI	HU 2005-537	A	20050526		
	WO 2006-HU49	W	20060526		

OS CASREACT 146:7754; MARPAT 146:7754
GI



I

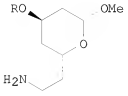
AB A process was disclosed for the preparation of rosuvastatin I (R = R3 = R5 = H) and comprised alkaline hydrolysis of an ester I (R = alkyl, R3R5 = CMe2) to give a corresponding acid I (R = H, R3R5 = CMe2),

reacting the acid with an organic or inorg. base to form a salt I (R = H.1/2Mg, MeNH2, H.PhCH2NH2, H.HOCH2CH2NH2, etc.; R3R5 = CMe2), eliminating the acetonide group and conversion to the Ca2+ salt of rosuvastatin I (R = H.1/2Ca, R3 = R5 = H) using CaCl2.

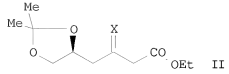
L4 ANSWER 48 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1224942 CAPLUS
DN 145:505262
TI Process for the asymmetric synthesis of statins
IN Tararov, Vitali; Boerner, Armin; Koenig, Gerd; Korostylev, Andrei
PA Ratiopharm G.m.b.H., Germany
SO PCT Int. Appl., 49pp.
CODEN: PIXXD2
DT Patent
LA German
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006122644	A2	20061123	WO 2006-EP3987	20060428
	WO 2006122644	A3	20070215		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	DE 102005022284	A1	20061123	DE 2005-102005022284	20050513
	CA 2608232	A1	20061123	CA 2006-2608232	20060428
	EP 1888600	A2	20080220	EP 2006-742738	20060428
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR				
PRAI	DE 2005-102005022284	A	20050513		
	WO 2006-EP3987	W	20060428		

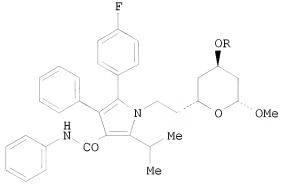
OS MARPAT 145:505262
GI



I



II



III

AB A process was disclosed for the synthesis of statins, such as fluvastatin, rosuvastatin, cerivastatin, glenvastatin and atorvastatin, which are therapeutically useful as hydroxymethylglutaryl CoA (HMG-CoA) reductase inhibitors. Thus, amine I (R = SiPh2CMe3) was via a synthetic sequence which included an enantioselective reduction of ketone II (X = O) to form alc. II (X = β-OH-α-H) using H2, (R)-TolBINAP and [Ru(C6H6)Cl2]2 in DMF. Atorvastatin intermediate III (R = SiPh2CMe3) was then prepared via a cyclocondensation reaction of amine I (R = SiPh2CMe3) with 2-[2-(4-fluorophenyl)-2-oxo-1-phenylethyl]-4-methyl-3-oxopentanoic acid phenylamide using Me3CCO2H in heptane/THF/toluene.

L4 ANSWER 49 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1062704 CAPLUS
DN 145:419163
TI Process for preparation of calcium salt of rosuvastatin
IN Deshpande, Pandurang Balwant; Ramakrishnan, Arul; Nilesh, Balkrishna Shrigadi; Sandeep, Mukunda Bahul
PA Unichem Laboratories Limited, India
SO PCT Int. Appl., 33pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006106526	A1	20061012	WO 2005-IN265	20050809
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	IN 2005MU00425	A	20070511	IN 2005-MU425	20050404
	EP 1869005	A1	20071226	EP 2005-815764	20050809
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BA, HR, YU				
	US 20080161560	A1	20080703	US 2007-816155	20070813
PRAI	IN 2005-MU425	A	20050404		
	WO 2005-IN265	W	20050809		

OS CASREACT 145:419163
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a com. viable process for the preparation of the calcium salt of rosuvastatin (I), which is a HMG-CoA reductase inhibitor used for the prevention or treatment of hypercholesterolemia, hyperlipoproteinemia, and atherosclerosis. The process makes use of novel intermediates (claimed) and less expensive reagents than prior art. The process allows for the preparation of the calcium salt of rosuvastatin (I), illustrated by the following example. Wittig reaction of a pyrimidinecarboxaldehyde (RCHO) with (ethoxycarbonylmethylene)triphenylphosphorane in toluene at reflux gave Et acrylate II. Hydrolysis of the ester was performed using NaOH in methanol at 25-29°C for 8 h. The acrylic acid was activated with 1,1'-carbonyldiimidazole and alkylated with potassium monomethyl malonate in the presence of magnesium chloride in THF at 25-28°C for 2 h followed by 24 h at 35°C, resulting in the formation of oxopentenoate III. The ketone of III underwent hydride reduction with NaBH4 in THF:methanol (4:1) at -65°C for 1-2 h followed by hydrolysis with NaOH in methanol at 27-29°C and diastereomeric salt resolution with (R)-α-methylbenzylamine in ethanol to give

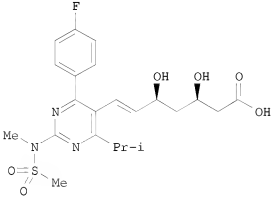
hydroxypentenoic acid IV. The salt of IV was recrystd. from acetone:methanol (4:1). The carboxylic acid of IV was activated with 1,1'-carbonyldiimidazole and reacted with potassium monomethyl malonate in the presence of magnesium chloride in THF at 25-28°C for 2 h followed by 24 h at 30-35°C, resulting in the formation of oxoheptenoate V. Compound V underwent stereoselective reduction with NaBH4 in the presence of diethylmethoxyborane in THF:methanol (4:1) at -78°C for 3 h. Hydrolysis of the dihydroxyheptenoate with NaOH followed by treatment with aqueous calcium chloride gave the calcium salt of rosuvastatin (I).

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 50 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:1010086 CAPLUS
DN 145:377370
TI Process for preparation of Rosuvastatin and its calcium salt
IN Deshpande, Pandurang Balwant; Ramakrishnan, Arul; Nilesh, Balkrishna Shrigadi; Ranjit, Anil Gokhale
PA Unichem Laboratories Limited, India
SO PCT Int. Appl., 28pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006100689	A1	20060928	WO 2005-IN266	20050809
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	IN 2005MU00325	A	20070302	IN 2005-MU325	20050322
	EP 1863773	A1	20071212	EP 2005-815761	20050809
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BA, HR, YU				
PRAI	IN 2005-MU325	A	20050322		
	WO 2005-IN266	W	20050809		

OS CASREACT 145:377370
GI



I

AB The invention relates to com. viable process for the preparation of Rosuvastatin (I) by an early introduction of the correct absolute stereochem. at C-5 (S) of Rosuvastatin side chain followed by regioselective chain extension using novel side chain building blocks. It

is yet another object of the invention is to provide intermediates that may be used for the preparation of Rosuvastatin. The Rosuvastatin calcium salt is also prepared in this invention.

RE.CNT 6 THERE ARE 6 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 51 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:891056 CAPLUS
DN 145:299533
TI Rosuvastatin and salts thereof free of rosuvastatin alkyl ether and a process for the preparation thereof
IN Niddam-Hildesheim, Valerie; Balanov, Anna; Shenkar, Natalia
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 45 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 5

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006091770	A2	20060831	WO 2006-US6519	20060222
	WO 2006091770	A3	20070531		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AP, EA, EP, OA				
	CA 2591439	A1	20060831	CA 2006-2591439	20060222
	US 20060258882	A1	20061116	US 2006-360289	20060222
	EP 1851206	A2	20071107	EP 2006-735971	20060222
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, MK, YU				
	JP 2007533764	T	20071122	JP 2007-509753	20060222
	IN 2007DN05161	A	20070817	IN 2007-DN5161	20070704
	KR 2007095414	A	20070928	KR 2007-718633	20070814
	CN 101128437	A	20080220	CN 2006-80005642	20070821
PRAI	US 2005-655580P	P	20050222		
	US 2005-676388P	P	20050428		
	US 2005-723491P	P	20051003		
	US 2005-723875P	P	20051004		
	US 2005-732979P	P	20051102		
	US 2005-751079P	P	20051215		
	US 2006-760506P	P	20060119		
	US 2006-762348P	P	20060125		
	WO 2006-US6519	W	20060222		

OS MARPAT 145:299533
AB The present invention provides rosuvastatin and intermediates thereof having a low level of alkylether impurity and processes for the preparation thereof.

L4 ANSWER 52 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:882914 CAPLUS
DN 145:293078
TI Process for preparation of rosuvastatin calcium as HMG-CoA reductase inhibitor
IN Wang, Siqing; Wu, Bin; Xu, Shuxing
PA Yabang Chemical Group Co., Ltd., Peop. Rep. China; Changzhou Yabang Pharmaceutical Research Institute Co., Ltd.
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 12pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1821242	A	20060823	CN 2006-10007556	20060216
PRAI	CN 2006-10007556		20060216		

OS CASREACT 145:293078; MARPAT 145:293078
AB This invention relates to a method for preparation of rosuvastatin calcium as HMG-CoA reductase inhibitor, which comprises oxidation, coupling, deprotection, and hydrolysis processes.

L4 ANSWER 53 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:828291 CAPLUS
DN 146:394762
TI Results from a rosuvastatin historical cohort study in more than 45 000 dutch statin users, a PHARMO study
AU Goettsch, W. G.; Heintjes, E. M.; Kastelein, J. J. P.; Rabelink, T. J.; Johansson, Saga; Herings, R. M. C.
CS PHARMO Institute, Utrecht, Neth.
SO Pharmacoepidemiology and Drug Safety (2006), 15(7), 435-443
CODEN: PDSAEA; ISSN: 1053-8569
PB John Wiley & Sons Ltd.
DT Journal
LA English
AB Purpose: Clin. benefits of statin therapy are accepted, but their safety profiles have been under scrutiny, particularly for the recently introduced statin, rosuvastatin, relating to serious adverse events involving muscle, kidney and liver. Therefore, a historical cohort study was performed to evaluate the association between rosuvastatin vs. other statin use and the incidence of rhabdomyolysis, myopathy, acute renal failure and hepatic impairment. Methods: Incident users of rosuvastatin or other statins in 2003-2004 and a cohort of patients not prescribed statins were included from the PHARMO database of >2 million Dutch residents. Cases of hospitalizations for myopathy, rhabdomyolysis, acute renal failure or hepatic impairment were identified for these cohorts. Potential cases were validated through a multi-step process using data obtained from hospital records. Addnl., cases of all cause deaths were identified from certification alone. Results: In 2003 and 2004, 10 147 incident rosuvastatin users, 37 396 incident other statin users and 99 935 patients without statin prescriptions were included. There were 26 validated outcome events in the three cohorts including one case each of myopathy (other statin group) and rhabdomyolysis (non-treated group). There were no significant differences in the incidence of outcome events between rosuvastatin and other statin users. Conclusion: This study indicated that the number of outcome events is less than 1 per 3000 person years. This study in more than 45 000 Dutch statin users suggests that rosuvastatin does not lead to an increased incidence of rhabdomyolysis, myopathy, acute renal failure or hepatic impairment compared to other statins.
RE.CNT 30 THERE ARE 30 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 54 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:735324 CAPLUS
DN 145:188897
TI Process for preparation of Rosuvastatin calcium
IN Huang, Qingyun
PA Anhui Qingyun Pharmaceutical and Chemical Co., Ltd., Peop. Rep. China
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA Chinese
FAN.CNT 1

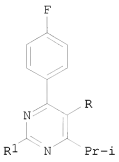
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006076845	A1	20060727	WO 2005-CN1958	20051118
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	CN 1807418	A	20060726	CN 2005-10038203	20050119
	US 20080091014	A1	20080417	US 2007-795123	20070711
PRAI	CN 2005-10038203	A	20050119		
	WO 2005-CN1958	W	20051118		

OS CASREACT 145:188897
AB The present invention discloses a process for synthesis of Rosuvastatin calcium. The process uses 4-4'-fluorophenyl-6-isopropyl-2-(N-methyl-N-mesylamino)pyrimidine-5-carboxaldehyde as initial material via nitrilation to give 4-4'-fluorophenyl-6-isopropyl-2-(N-methyl-N-mesylamino)pyrimidine-5-propenonitrile, then hydroformylation to obtain 4-4'-fluorophenyl-6-isopropyl-2-(N-methyl-N-mesylamino)pyrimidine-5-propenal, after extending the side chain, reducing the carbonyl group, hydrolysis acetate group and carrying out neutralization or metathetical reaction. The above mentioned nitrilation agent is di-Et phosphate acetonitrile or acetonitrile; hydroformylation agent is diisobutyl aluminum hydride, red aluminum; the ketone-reducing agent is diethylmethoxyborane and NaBH4, KBH4.
RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 55 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:634801 CAPLUS
DN 145:103710
TI Process for the manufacture of (E)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidin-5-yl](3R,5S)-3,5-dihydroxyhept-6-enoic acid (rosuvastatin)
IN Butters, Michael; Lenger, Steven Robert; Murray, Paul Michael; Snape, Evan William
PA Astrazeneca UK Limited, UK
SO PCT Int. Appl., 51 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006067456	A2	20060629	WO 2005-GB4999	20051222
	WO 2006067456	A3	20060921		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	AU 2005317880	A1	20060629	AU 2005-317880	20051222
	CA 2589775	A1	20060629	CA 2005-2589775	20051222
	CN 101084197	A	20071205	CN 2005-80044053	20051222
	EP 1871747	A2	20080102	EP 2005-820940	20051222
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, HR				
	JP 2008525407	T	20080717	JP 2007-547647	20051222
	NO 2007002872	A	20070917	NO 2007-2872	20070606
	IN 2007DN04373	A	20070824	IN 2007-DN4373	20070608
	US 20080207903	A1	20080828	US 2007-793418	20070620
	MX 200707777	A	20070814	MX 2007-7777	20070622
	KR 2007092307	A	20070912	KR 2007-717101	20070724
PRAI	GB 2004-28328	A	20041224		
	WO 2005-GB4999	W	20051222		

OS MARPAT 145:103710
GI



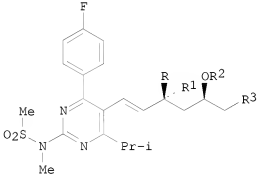
I

AB The invention relates to a process for preparation of rosuvastatin [I; R = (E)-(3R,5S)-3,5-dihydroxyhept-6-enoic acid residue, R1 = MeSO2NMe] involving reaction of I (R is a leaving group, R1 is MeSO2NMe or a precursor) with a protected 3,5-dihydroxyhept-6-enoic acid derivative or related compound Thus, treatment of N-[5-bromo-4-(4-fluorophenyl)-6-isopropylpyrimidin-2-yl]-N-methylmethanesulfonamide with tert-Bu 2-[(4R,6S)-2,2-dimethyl-6-vinyl-1,3-dioxan-4-yl]acetate in aqueous DMF containing bis(tri-tert-butylphosphine)palladium and N,N-dicyclohexylmethylamine afforded tert-Bu 2-[(4R,6S)-6-[(E)-2-[4-(4-fluorophenyl)-6-isopropyl-2-(N-methylmethanesulfonamido)pyrimidin-5-yl]vinyl]-2,2-dimethyl-1,3-dioxan-4-yl]acetate. The latter was converted into rosuvastatin calcium salt.

L4 ANSWER 56 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:557998 CAPLUS
DN 145:27769
TI A novel process for the preparation of rosuvastatin
IN Kumar, Yatendra; Meeran, Hashim Nizar Poovanathi; De, Shantanu; Rafeeq, Mohammad; Sathyanarayana, Swargam
PA Ranbaxy Laboratories Limited, India
SO Indian, 18 pp.
CODEN: INXXAP
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI IN 192529	A1	20040424	IN 2001-DE1229	20011207
PRAI IN 2001-DE1229		20011207		

OS CASREACT 145:27769
GI



I

AB A process was disclosed for the preparation of rosuvastatin hemicalcium salt I (R = OH, R1 = R2 = H, R3 = CO2-.1/2Ca2+). The process comprised an olefination reaction of (S)-P3P:CHCOCH2CH(OSiMe2CMe3)CH2CN with N-[4-(4-fluorophenyl)-5-formyl-6-(1-methylethyl)-2-pyrimidinyl]-N-methylmethanesulfonamide in an organic solvent at reflux temperature for about 1 to 100 h to form olefin I (RR1 = O, R2 = SiMe2CMe3, R3 = CN), dissolving the olefin in an organic solvent and deprotecting the silyl group with an acid or tetrabutylammonium fluoride to afford the cyanoketo alc. I (RR1 = O, R2 = H, R3 = CN), treating the cyanoketo alc. with a reducing agent in a solvent mixture comprising an alc. and non-alc. organic solvent to get cyanodiol I (R = OH, R1 = R2 = H, R3 = CN), and finally, hydrolyzing the cyanodiol and conversion to the desired carboxylate calcium salt.

L4 ANSWER 57 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:541825 CAPLUS
DN 145:342292
TI Long-acting preparation of statins
IN Zhu, Zuolin; Ye, Hongping; Sun, Meng
PA Huaibei City Huike Pharmaceutical Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 16 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1778296	A	20060531	CN 2005-10085860	20050719
	WO 2007009320	A1	20070125	WO 2005-CN1967	20051121
	W:	AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW			
	RW:	AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM			

PRAI CN 2005-10085860 A 20050719

AB The drug delivery system comprises pressure-sensitive adhesive layer containing high mol. polymer of statins, film of dimethicone, drug-storing layer, and proofed breathable sarking. The pressure-sensitive adhesive layer is high mol. polymer of polyacrylic acids. The drug-storing layer contains lanolin, and statin medicine. The statin medicine is lovastatin, simvastatin, pravastatin, atorvastatin, rosuvastatin, fluvastatin, pitavastatin, huivastatin, and their salt, etc. The preparation process comprises (a) preparing blank paste cloth; (b) preparing drug-storing paste cloth; and (3) slicing to obtain the product.

L4 ANSWER 58 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:407657 CAPLUS
DN 145:34075
TI Medical composition containing amlodipine benzenesulfonate and rosuvastatin calcium, and its preparation
IN Zhang, Zhenggen; Sun, Haisheng; Xu, Feng; Zhang, Yubin; Yu, Yongfa; Yin, Bixi
PA Yangtze River Pharmaceutical Group Co., Ltd., Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, 7 pp.
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1762361	A	20060426	CN 2005-10094723	20050928
PRAI	CN 2005-10094723		20050928		

AB The medical composition is comprised of amlodipine benzenesulfonate 5-40, rosuvastatin calcium 5-40, and pharmaceutic adjuvant 20-90%. The preparation process consists of grinding amlodipine benzenesulfonate, rosuvastatin calcium and pharmaceutic adjuvant into 60-100 mesh size, preparing soft materials with 5%-20% adhesive solution, pelleting and passing 20-50 mesh, drying at 50-90 °, adding lubricant, mixing, and preparing various formulations. The pharmaceutic adjuvant is lactose, microcryst. cellulose, sodium carboxymethyl starch, povidone K30, and magnesium stearate.

L4 ANSWER 59 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:316902 CAPLUS
DN 144:376459
TI Novel processes for preparing amorphous rosuvastatin calcium and a novel polymorphic form of rosuvastatin sodium
IN Rafeeq, Mohammad; De, Shantanu; Sathyanarayana, Swargam; Kumar, Yatendra
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 19 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006035277	A2	20060406	WO 2005-IB2784	20050920
	WO 2006035277	A3	20060803		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	EP 1797046	A2	20070620	EP 2005-797982	20050920
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	IN 2007DN03039	A	20070831	IN 2007-DN3039	20070423
PRAI	IN 2004-DE1844	A	20040927		
	IN 2004-DE1845	A	20040927		
	WO 2005-IB2784	W	20050920		

AB Provided are processes for preparing amorphous rosuvastatin calcium from crystalline rosuvastatin calcium by simple crystallization processes. Also provided is a novel polymorphic form of rosuvastatin sodium, processes for preparing thereof and pharmaceutical compns. thereof. Crystalline rosuvastatin calcium (20 g) was added to denatured spirit (40 mL) and the resultant mixture was stirred for 10 min at ambient temperature and then heated to about 77° to form produce a clear solution The clear solution was immediately cooled to about 0° over 10 min. The resultant suspension was stirred at 0°C for 30 min. The separated product was filtered and dried under vacuum at about 40-45° to yield amorphous rosuvastatin calcium, yield: 1.3 g (65%), HPLC purity:99.72%.

L4 ANSWER 60 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:300841 CAPLUS
DN 144:363029
TI Active Metabolite of Atorvastatin Inhibits Membrane Cholesterol Domain Formation by an Antioxidant Mechanism
AU Mason, R. Preston; Walter, Mary F.; Day, Charles A.; Jacob, Robert F.
CS Elucida Research, Beverly, MA, 01915-0091, USA
SO Journal of Biological Chemistry (2006), 281(14), 9337-9345
CODEN: JBCHA3; ISSN: 0021-9258
PB American Society for Biochemistry and Molecular Biology
DT Journal
LA English
AB The advanced atherosclerotic lesion is characterized by the formation of microscopic cholesterol crystals that contribute to mechanisms of inflammation and apoptotic cell death. These crystals develop from membrane cholesterol domains, a process that is accelerated under conditions of hyperlipidemia and oxidative stress. In this study, the comparative effects of hydroxymethylglutaryl-CoA (HMG-CoA) reductase inhibitors (statins) on oxidative stress-induced cholesterol domain formation were tested in model membranes containing physiol. levels of cholesterol using small angle x-ray diffraction approaches. In the absence of HMG-CoA reductase, only the atorvastatin active o-hydroxy metabolite (ATM) blocked membrane cholesterol domain formation as a function of oxidative stress. This effect of ATM is attributed to electron donation and proton stabilization mechanisms associated with its phenoxy group located in the membrane hydrocarbon core. ATM inhibited lipid peroxidn. in human low d. lipoprotein and phospholipid vesicles in a dose-dependent manner, unlike its parent and other statins (pravastatin, rosuvastatin, simvastatin). These findings indicate an atheroprotective effect of ATM on membrane lipid organization through a potent antioxidant mechanism.
RE.CNT 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 61 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:168208 CAPLUS
DN 144:233196
TI Process for preparation of chiral cyclic arylboronate esters by esterification of 3,5-dihydroxycarboxylates with arylboronic acids
IN Puthiaparampil, Tom Thomas; Srinath, Sumithra; Sridharan, Madhavan; Ganesh, Sambasivam
PA India
SO U.S. Pat. Appl. Publ., 22 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 2

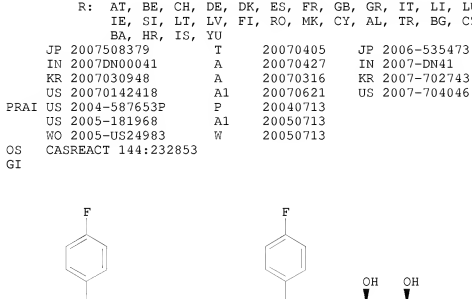
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20060040898	A1	20060223	US 2004-923934	20040823
	US 7238826	B2	20070703		
	WO 2003070733	A1	20030828	WO 2002-IN32	20020225
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	US 20050154213	A1	20050714	US 2004-505528	20040823
	US 7301046	B2	20071127		
PRAI	WO 2002-IN32	W	20020225		
	US 2004-505528	A2	20040823		

OS CASREACT 144:233196; MARPAT 144:233196
AB Chiral optically active cyclic boronates, 2-Ar-6-XCH2-1,3,2-dioxaborinane-4-R3-acetates [Ar = (un)substituted C6-10 (hetero)aryl, R3 = (un)branched C1-8 alkyl, C6-10 aryl, aralkyl; X = OH, protected hydroxy, halo, CN] and aldehydoester derivs. 2-Ar-6-(OHC)-1,3,2-dioxaborinane-4-R3-acetates (same Ar, R3), useful as intermediates for the synthesis of anti-hypercholesterolemia HMG-CoA enzyme inhibitors such as atorvastatin, cerivastatin, rosuvastatin, pitavastatin, and fluvastatin (no data) were prepared by improved process comprising Claisen condensation of protected 3,4-dihydroxybutyrate with MeCO2tBu, followed by reduction of the ketoester to 6-trityloxy 3,5-dihydroxyhexanoate, esterification with ArB(OH)2 and deprotection of the exocyclic hydroxy-group; thus obtained 6-hydroxymethyl 2-Ar-1,3,2-dioxaborinane-4-R3-acetates were converted to the corresponding 6-halomethyl, 6-cyanomethyl and 6-formyl derivs. by substitution and oxidation reactions. In an example, Me (3S)-4-trityloxy-3-hydroxybutyrate was converted to tert-Bu (5S)-5-hydroxy-3-oxo-6-(trityloxy)hexanoate by LDA-initiated condensation with tert-Bu acetate; stereoselective reduction of the product by methoxydiethylborane yielded tert-Bu (3R,5S)-3,5-dihydroxy-6-(trityloxy)hexanoate (3). In another example, the dihydroxy-derivative 3 was esterified by ArB(OH)2 to give after deprotection the hydroxymethyl derivs. tert-Bu (4R,5S)-2-Ar-6-HOCH2-1,3,2-dioxaborinane-4-acetates (Ar = Ph, 1-naphthalenyl, 4-MeOC6H4, 8-quinolinyl, 3-NO2C6H4, 2,6-F2C6H3); the phenylboronic derivative was converted to 6-cyanomethyl- and 6-formyl-substituted (4R,5S)-2-Ar-1,3,2-dioxaborinane-4-acetates.

L4 ANSWER 62 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:149308 CAPLUS
DN 144:232853
TI A process for the preparation of rosuvastatin involving a TEMPO-mediated oxidation step
IN Niddam-Hildesheim, Valerie; Chen, Kobi
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 25 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2006017357	A1	20060216	WO 2005-US24983	20050713
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KM, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, LV, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG, BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM				
	CA 2573857	A1	20060216	CA 2005-2573857	20050713
	US 20060089501	A1	20060427	US 2005-181968	20050713
	US 7179916	B2	20070220		
	EP 1673351	A1	20060628	EP 2005-771256	20050713
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2007508379	T	20070405	JP 2006-535473	20050713
	IN 2007DN00041	A	20070427	IN 2007-DN41	20070102
	KR 2007030948	A	20070316	KR 2007-702743	20070202
	US 20070142418	A1	20070621	US 2007-704046	20070207
PRAI	US 2004-587653P	P	20040713		
	US 2005-181968	A1	20050713		
	WO 2005-US24983	W	20050713		

OS CASREACT 144:232853
GI



AB This invention provides a process for the preparation of the rosuvastatin intermediate I (R = CHO) by TEMPO-mediated oxidation of the corresponding alc. I (R = CH2OH), and its subsequent conversion to rosuvastatin II (R1 = H) and pharmaceutically acceptable salts thereof, such as II (R1 = Na, 1/2Ca).

RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 63 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:86301 CAPLUS
DN 144:267040
TI Effect of rosuvastatin on hepatic production of apolipoprotein B-containing lipoproteins in an animal model of insulin resistance and metabolic dyslipidemia
AU Chong, Taryne; Naples, Mark; Federico, Lisa; Taylor, Denise; Smith, Graham J.; Cheung, Raphael C.; Adeli, Khosrow
CS Division of Clinical Biochemistry, Research Institute, Hospital for Sick Children & Department of Laboratory Medicine and Pathobiology, University of Toronto, Toronto, ON, M5G 1X8, Can.
SO Atherosclerosis (Amsterdam, Netherlands) (2006), 185(1), 21-31
CODEN: ATHSBL; ISSN: 0021-9150
PB Elsevier B.V.
DT Journal
LA English
AB A novel animal model of insulin resistance, the fructose-fed Syrian golden hamster, was employed to investigate the efficacy and mechanisms of action of rosuvastatin, a HMG-CoA reductase inhibitor, in ameliorating metabolic dyslipidemia in insulin-resistant states. Fructose feeding for a 2-wk period induced insulin resistance and a significant increase in hepatic secretion of VLDL. This was followed by a fructose-enriched diet with or without 10 mg/kg rosuvastatin for 14 days. Fructose feeding in the first 2 wk caused a significant increase in plasma total cholesterol and triglyceride in both groups ($n = 6$, $p < 0.001$). However, there was a significant decline (30%, $n = 8$, $p < 0.05$) in plasma triglyceride levels following rosuvastatin feeding (10 mg/kg). A significant decrease ($n = 6$, $p < 0.05$) was also observed in VLDL-apoB production in hepatocytes isolated from drug-treated hamsters, together with an increased apoB degradation ($n = 6$, $p < 0.05$). Similar results were obtained in parallel cell culture expts. in which primary hepatocytes were first isolated from chow-fed hamsters, and then treated in vitro with 15 μM rosuvastatin for 18 h. Rosuvastatin at 5 μM caused a substantial reduction in synthesis of unesterified cholesterol and cholesterol ester (98 and 25%, $n = 9$, $p < 0.01$ or $p < 0.05$) and secretion of newly synthesized unesterified cholesterol, cholesterol ester, and triglyceride (95, 42, and 60% reduction, resp., $n = 9$, $p < 0.01$ or $p < 0.05$). This concentration of rosuvastatin also caused a significant reduction (75% decrease, $n = 4$, $p < 0.01$) in the extracellular secretion of VLDL-apoB100, accompanied by a significant increase in the intracellular degradation of apoB100. There was a 12% reduction (not significant, $p > 0.05$) in hepatic MTP and no changes in ER-60 (a chaperone involved in apoB degradation) protein levels. Taken together, these data suggest that the assembly and secretion of VLDL particles in hamster hepatocytes can be acutely inhibited by rosuvastatin in a process involving enhanced apoB degradation This appears to lead to a significant amelioration of hepatic VLDL-apoB overprodn. observed in the fructose-fed, insulin-resistant hamster model.
RE.CNT 39 THERE ARE 39 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 64 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2006:13869 CAPLUS
DN 144:108142
TI Chemoselective catalytic oxidative processes to produce aldehyde group-containing intermediates for rosuvastatin preparation
IN Gudipati, Srinivasulu; Katkam, Srinivas; Sagyam, Rajeshwar Reddy; Kudavalli, Jaya Satyanaraya
PA Dr. Reddy's Laboratories Limited, India; Dr. Reddy's Laboratories, Inc.
SO U.S. Pat. Appl. Publ., 4 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 20060004200	A1	20060105	US 2005-157552	20050621
US 7161004	B2	20070109		
PRAI US 2004-581480P	P	20040621		

OS CASREACT 144:108142
AB Intermediate compds. [e.g., tert-Bu 2-[(4R,6S)-6-formyl-2,2-dimethyl-1,3-dioxan-4-yl]acetate] for preparing rosuvastatin are prepared by a process comprising chemoselectively oxidizing hydroxymethyl groups [e.g., tert-Bu (4R-cis)-6-(hydroxymethyl)-2,2-dimethyl-1,3-dioxane-4-acetate] into aldehyde groups using sodium hypochlorite as the oxidant and 2,2,6,6-tetramethylpiperidinyloxy free radical as a catalyst.
RE.CNT 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 65 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:1075781 CAPLUS
DN 143:367145
TI Process and intermediate compounds useful in the preparation of statins, particularly rosuvastatin
IN Moody, David John; Wiffen, Jonathan William
PA Avecia Pharmaceuticals Limited, UK
SO PCT Int. Appl., 16 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005092867	A2	20051006	WO 2005-GB1099	20050323
	WO 2005092867	A3	20051110		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SM, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, MR, NE, SN, TD, TG				
	AU 2005225602	A1	20051006	AU 2005-225602	20050323
	CA 2561059	A1	20051006	CA 2005-2561059	20050323
	EP 1729775	A2	20061213	EP 2005-731809	20050323
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
	BR 2005007999	A	20070731	BR 2005-7999	20050323
	CN 101022807	A	20070822	CN 2005-80009682	20050323
	JP 2007530521	T	20071101	JP 2007-504474	20050323
	EP 1958633	A2	20080820	EP 2008-157487	20050323
	EP 1958633	A3	20080827		
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, AL, BA, HR, LV, MK, YU				
	IN 2006KN03061	A	20070608	IN 2006-KN3061	20061023
PRAI	GB 2004-6757	A	20040326		
	EP 2005-731809	A3	20050323		
	WO 2005-GB1099	W	20050323		

OS CASREACT 143:367145; MARPAT 143:367145
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for preparing I [R1 = alkyl; R2 = aryl; R3 = H, alkyl, or protecting group; R4 = H, protecting group, SO2R5, where R5 = alkyl] and intermediates thereof are disclosed. Hydroxylation of II [Y = halo; W = (=O) or OP2; P1 and P2 independently = H or protecting group] followed by oxidation provides III; coupling of III with IV [R6 = (PR7R8)+X- or P(=O)R7R8 in which X is an anion and R7 and R8 independently = alkyl, aryl, alkoxy or aryloxy] followed by oxidation provides V. V undergoes ring opening with

optional removal of O-protecting groups to give I.

L4 ANSWER 66 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:902867 CAPLUS
DN 143:229878
TI Preparation of amorphous salts of rosuvastatin
IN Kumar, Yatendra; Rafeeq, Mohammad; De, Shantanu; Sathyanarayana, Swargam
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 46 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005077917	A1	20050825	WO 2005-IB132	20050119
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	EP 1737828	A1	20070103	EP 2005-702294	20050119
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	IN 2006DN04805	A	20070831	IN 2006-DN4805	20060822
PRAI	IN 2004-DE77	A	20040119		
	WO 2005-IB132	W	20050119		

AB An amorphous crystalline form of rosuvastatin magnesium is described as is a process for its preparation from crystalline rosuvastatin magnesium, rosuvastatin Me ammonium salt, and from rosuvastatin lactone is described.

RE.CNT 7 THERE ARE 7 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 67 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:673108 CAPLUS
DN 143:159611
TI Pharmaceutical compositions comprising higher primary aliphatic alcohols and HMG CoA reductase inhibitor and process of preparation thereof
IN Jindal, Kour Chand; Singh, Sukhjeet; Jain, Rajesh
PA Panacea Biotec Ltd., India
SO PCT Int. Appl., 30 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005067921	A1	20050728	WO 2005-IN24	20050119
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	IN 2004DE00099	A	20060210	IN 2004-DE99	20040120
	AU 2005205165	A1	20050728	AU 2005-205165	20050119
	AU 2005205165	B2	20080424		
	CA 2553988	A1	20050728	CA 2005-2553988	20050119
	EP 1755587	A1	20070228	EP 2005-709165	20050119
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LI, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	MX 2006PA09500	A	20061107	MX 2006-PA9500	20060818
PRAI	IN 2004-DE99	A	20040120		
	WO 2005-IN24	W	20050119		

AB A novel pharmaceutical composition comprising a mixture of higher primary aliphatic alcs. from (24) to (39) carbon atoms; at least one other component selected from resins and pigments, hydrocarbons, esters, ketones and aldehydes, and phenolic compds., and HMG CoA reductase inhibitor, its salts, analogs or derivs. thereof, preferably statins, optionally with pharmaceutically acceptable excipients, and process of preparation of such composition is provided. Also provided are a method of treatment and use of such composition for reducing abnormal lipid parameters associated with hyperlipidemia.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 68 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:651086 CAPLUS
DN 143:235374
TI Rosuvastatin dispersion tablet and its preparation method
IN Yang, Xihong
PA Peop. Rep. China
SO Faming Zhuanli Shenqing Gongkai Shuomingshu, No pp. given
CODEN: CNXXEV
DT Patent
LA Chinese
FAN.CNT 1

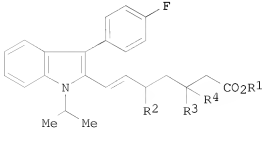
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	CN 1557319	A	20041229	CN 2004-10004908	20040209
PRAI	CN 2004-10004908		20040209		

AB The Rosuvastatin dispersing tablet consists of Rosuvastatin in 0.1-45%, preferably 5-20%, and medicinal supplementary material in 55-99.9%, preferably 80-95%. The medicinal supplementary material includes disintegrating agent, stuffing, wetting adhesive and wetting agent, and the dispersing tablet is prepared through wet pelletizing and tableting process. The Rosuvastatin dispersing tablet has the advantages of high disintegrating speed, convenience in taking, high acting speed, high bioavailability and thus high curative effect.

L4 ANSWER 69 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:612271 CAPLUS
DN 143:115390
TI Process for preparation of statins with high syn to anti ratio
IN Lifshitz-Liron, Revital; Perlman, Nurit
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 23 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 2

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005063728	A2	20050714	WO 2004-US43466	20041223
	WO 2005063728	A3	20060223		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, SM				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2550742	A1	20050714	CA 2004-2550742	20041223
	EP 1697338	A2	20060906	EP 2004-815531	20041223
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, BA, HR, IS, YU				
	JP 2007520464	T	20070726	JP 2006-545612	20041223
	JP 4037900	B2	20080123		
	TW 258370	B	20060721	TW 2004-93140548	20041224
	IN 2006DN02856	A	20070810	IN 2006-DN2856	20060519
	JP 2008031168	A	20080214	JP 2007-191419	20070723
PRAI	US 2003-532458P	P	20031224		
	US 2004-547715P	P	20040224		
	JP 2006-545612	A3	20041223		
	WO 2004-US43466	W	20041223		

OS CASREACT 143:115390; MARPAT 143:115390
GI



I

AB A process was disclosed for reduction of statin ketoesters, such as

RCH(Y)CH(OH)CH2COCH2CO2R1 [R = organic radical that is inert to redn and allows for inhibition of 3-hydroxy-3-methylglutaryl CoA; Y = H or forms a double bond with the R group; R1 = alkyl] and purification of the corresponding syn-diol esters syn-RCH(Y)CH(OH)CH2CH(OH)CH2CO2R1 of the statins via selective crystallization Thus, β-keto ester I (R1 = CMe3, R2 = OH, R3R4 = O) was reduced using 9-methoxy-9-borabicyclo[3.3.1]nonane and sodium borohydride in methanol at -70° for 2 h followed by treatment with 30% H2O2 soln to give syn-diol ester I (R1 = CMe3, R2 = R3 = β-OH, R4 = α-H) in 73% yield and 99.0:0.45 d.e. The syn-diol ester was further purified by crystallization and subsequently treated with 47% NaOH to form fluvastatin sodium salt I (R1 = Na, R2 = R3 = β-OH, R4 = α-H) in 87% yield.

L4 ANSWER 70 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:497491 CAPLUS
DN 143:26633
TI An improved process for preparation of rosuvastatin derivatives, useful as HMG-CoA inhibitor
IN Joshi, Narendra; Bhirud, Shekhar Bhaskar; Chandrasekhar, Batchu; Rao, K. Eswara; Damle, Subhash
PA Glenmark Pharmaceuticals Limited, India
SO U.S. Pat. Appl. Publ., 15 pp.
CODEN: USXXCO
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	US 20050124639	A1	20050609	US 2004-4755	20041203
	US 7312329	B2	20071225		
	IN 2003MU01244	A	20060505	IN 2003-MU1244	20031204
	WO 2005054207	A1	20050616	WO 2004-IB3962	20041202
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	IN 2003-MU1244	A	20031204		
	US 2004-561732P	P	20040413		
	IN 2004-MU442	A3	20040413		

OS CASREACT 143:26633; MARPAT 143:26633
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The invention relates to a preparation of rosuvastatin derivs. of formula I [wherein: R1 is alkyl, aryl, or arylalkyl; R2 and R3 are independently H or hydrocarbon; R4 is H, alkyl, or a cation capable of forming a non-toxic pharmaceutically acceptable salt; each R5 are independently H or a protecting group, etc.; Z is S, O, sulfonyl, or imino, etc.] from a Wittig reagent of formula II•X- (R is alkyl, aryl, or arylalkyl; , X- is a halogen) and aldehyde of formula III. No biol. data was reported. For instance, rosuvastatin derivative IV was prepared via Wittig reaction from aldehyde V and ylide VI with a yield of 88-90%.
RE.CNT 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 71 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:493592 CAPLUS
DN 143:32342
TI Preparation and purification of crystalline rosuvastatin ammonium salts and rosuvastatin calcium
IN Niddam-Hildesheim, Valerie; Aronhime, Judith
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 28 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI WO 2005051921	A1	20050609	WO 2004-US39469	20041124
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
CA 2546701	A1	20050609	CA 2004-2546701	20041124
US 20050131066	A1	20050616	US 2004-996483	20041124
EP 1601658	A1	20051207	EP 2004-812066	20041124
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR, IS, YU				
CN 1906175	A	20070131	CN 2004-80040800	20041124
IN 2006DN02567	A	20070810	IN 2006-DN2567	20060508
PRAI US 2003-525128P	P	20031124		
US 2004-534479P	P	20040105		
WO 2004-US39469	W	20041124		

AB Provided are alkyl ammonium crystalline salts of rosuvastatin that provide for purification of rosuvastatin and its pharmaceutically acceptable salts. A process for purifying rosuvastatin calcium includes (a) converting rosuvastatin calcium salt to rosuvastatin acid; (b) converting rosuvastatin acid to rosuvastatin isopropylammonium salt; (c) converting the isopropylammonium salt to rosuvastatin calcium.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 72 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:409510 CAPLUS
DN 142:463747
TI Process for the manufacture of the calcium salt of rosuvastatin (E)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidin-5-yl](3R,5S)-3,5-dihydroxyhept-6-enoic acid and their crystalline intermediates
IN Okada, Tetsuo; Horbury, John; Laffan, David Dermot Patrick
PA Astrazeneca Uk Limited, UK; Shionogi & Company Limited
SO PCT Int. Appl., 42 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005042522	A1	20050512	WO 2004-GB4481	20041022
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2004285750	A1	20050512	AU 2004-285750	20041022
	AU 2004285750	B2	20080313		
	CA 2543358	A1	20050512	CA 2004-2543358	20041022
	EP 1682536	A1	20060726	EP 2004-768997	20041022
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	BR 2004015681	A	20061219	BR 2004-15681	20041022
	CN 1898233	A	20070117	CN 2004-80038296	20041022
	JP 2007509119	T	20070412	JP 2006-536173	20041022
	IN 2006DN02189	A	20070615	IN 2006-DN2189	20060421
	MX 2006PA04553	A	20061110	MX 2006-PA4553	20060424
	NO 2006002263	A	20060519	NO 2006-2263	20060519
	US 20070255060	A1	20071101	US 2007-576774	20070316
	JP 2008024712	A	20080207	JP 2007-228620	20070904
	JP 2008044948	A	20080228	JP 2007-228621	20070904
PRAI	GB 2003-24791	A	20031024		
	JP 2006-536173	A3	20041022		
	WO 2004-GB4481	W	20041022		

OS MARPAT 142:463747
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB A process for the manufacture of the calcium salt of (E)-7-[4-(4-fluorophenyl)-6-isopropyl-2-[methyl(methylsulfonyl)amino]pyrimidin-5-yl](3R,5S)-3,5-dihydroxyhept-6-enoic acid (rosuvastatin), useful as an HMGCoA reductase inhibitor, from a compound of the formula I (A is an acetal or ketal protecting group, R is alkyl), via isolated crystalline compds. of the formula II (R1 = R, H, metal) and III is described. Crystalline

intermediates of formulas I-III are also described.
RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 73 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:238963 CAPLUS
DN 142:303754
TI Process for preparation of rosuvastatin calcium
IN Niddam-Hildesheim, Valerie; Sterimbaum, Greta
PA Teva Pharmaceutical Industries Ltd., Israel; Teva Pharmaceuticals USA, Inc.
SO PCT Int. Appl., 24 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005023778	A2	20050317	WO 2004-US27530	20040824
	WO 2005023778	A3	20050616		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2537271	A1	20050317	CA 2004-2537271	20040824
	US 20050080134	A1	20050414	US 2004-925430	20040824
	US 7396927	B2	20080708		
	EP 1562912	A2	20050817	EP 2004-782093	20040824
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, PL, SK, HR				
	CN 1875008	A	20061206	CN 2004-80024487	20040824
	EP 1816126	A1	20070808	EP 2007-107845	20040824
	R: AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LI, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR				
	IN 2006DN00658	A	20070831	IN 2006-DN658	20060208
PRAI	US 2003-498764P	P	20030828		
	US 2004-534678P	P	20040106		
	EP 2004-782093	A3	20040824		
	WO 2004-US27530	W	20040824		

AB The present invention provides processes for preparing calcium salts of statin, particularly rosuvastatin calcium salt substantially free of impurities on an industrial scale. For example, to a suspension of 10 g of tert-butylrosuvastatin in 100 mL of EtOH, 1.5 equiv (27.93 mL) of 1N NaOH was added at ambient temperature, and the mixture was stirred for 1 h to obtain clear solution The reaction mixture was concentrated under reduced pressure to obtain a residue (17.79 g) that contained the sodium salt. To this residue was added 100 mL of water, the aqueous phase was washed with EtOAc, traces of EtOAc in the aqueous phase were distilled off under reduced pressure at 60°, and CaCl2 1N (20 mL) was added dropwise resulting in precipitation of the calcium salt. The reaction mixture was then stirred at 15° for 2 h, filtered and washed with water to get a powdery compound (8.0 g, 86%).

L4 ANSWER 74 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:216802 CAPLUS
DN 142:285214
TI Process for the preparation of amorphous rosuvastatin calcium
IN Parthasaradhi, Reddy Bandi; Rathnakar, Reddy Kura; Raji, Reddy Rapolu; Muralidhara, Reddy Dasari
PA Hetero Drugs Limited, India
SO PCT Int. Appl., 8 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005021511	A1	20050310	WO 2003-IN288	20030827
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003269478	A1	20050316	AU 2003-269478	20030827
	IN 2003CN01347	A	20051125	IN 2003-CN1347	20030827
PRAI	WO 2003-IN288	A	20030827		

AB The present invention provides a novel process for the preparation of amorphous rosuvastatin calcium. Rosuvastatin calcium was dissolved in EtOH and the solution was subjected to vacuum drying at 55° for 10 h to give the amorphous form.
RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 75 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2005:120911 CAPLUS
DN 142:197756
TI Lactonization process for the production of statin lactones
IN Chandrapa, Ravindra; Poornaprajna, Achraya; Ganesh, Sambasivam
PA Biocon Limited, India
SO PCT Int. Appl., 15 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2005012279	A1	20050210	WO 2003-IN264	20030804
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	AU 2003263579	A1	20050215	AU 2003-263579	20030804
PRAI	WO 2003-IN264	A	20030804		

OS CASREACT 142:197756; MARPAT 142:197756
GI

* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

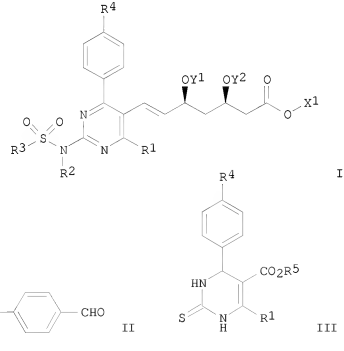
AB A process for preparation of lactone statins I [G = (un)substituted alkyl, aryl, heteroaryl] comprises reacting a statin acid or salt II [X = H, metal, amine] with sulfuric acid, where the sulfuric acid is added in one portion, at less than 0.8 equiv of the statin salt or acid, at less than −15° for <1 h in a water-miscible solvent (e.g., acetonitrile). Thus, simvastatin (III) was prepared from simvastatin ammonium salt (IV·+NH4) in MeCN containing butylated hydroxanisole to which H2SO4 was added.

RE.CNT 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 76 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:1037079 CAPLUS
DN 142:23301
TI Process for the preparation of pyrimidine derivatives
IN End, Nicole; Richter, Yvonne
PA Ciba Specialty Chemicals Holding Inc., Switz.
SO PCT Int. Appl., 36 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004103977	A2	20041202	WO 2004-EP50762	20040512
	WO 2004103977	A3	20050106		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
PRAI	EP 2003-405355	A	20030521		

OS MARPAT 142:23301
GI



AB There is described a process for the preparation of compds. of formula (I) [R1, R2, R3 = (un)substituted organic radical; R4 = H each

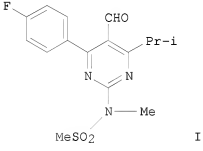
(un)substituted C1-8 alkyl, C1-8 alkoxy, phenoxy, or benzyloxy, halogen; Y1, Y2 = H, protecting group, or Y1 and Y2 together are a protecting bridge; X1 = H, organic radical or cation] starting from the reaction of the compds. of formulas (II), R1COCH2CO2R6 [R1, R6 = (un)substituted organic radical], and thiourea to form the compound of formula (III) (R1, R4, R6 = same as above) and also novel intermediates. Thus, Me isobutyrylacetate (21.6 g, 0.15 mol), thiourea (14.9 g, 0.2 mol), lanthanum chloride heptahydrate (21.5 g, 75 mmol) and 37% aqueous (1 mL) were added to a solution of p-fluorobenzaldehyde (18.6 g, 0.15 mol) in 300 mL ethanol. The reaction mixture was refluxed for 16 h and then poured into 500 mL hot water, cooled to 0° to give, after filtering the product precipitated out in the form of a colorless powder, washing with H2O, and drying in a drying oven at 50°, 41.5 g 4-(4-fluorophenyl)-6-isopropyl-2-thioxo-1,2,3,4-tetrahydropyrimidine-5-carboxylic acid Me ester (IV) (90 %). IV was converted into Rosuvastatin in many steps.

L4 ANSWER 77 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:627391 CAPLUS
DN 142:68474
TI Rosuvastatin pharmacokinetics in heart transplant recipients administered an antirejection regimen including cyclosporine
AU Simonson, Steven G.; Raza, Ali; Martin, Paul D.; Mitchell, Patrick D.; Jarcho, John A.; Brown, Colin D. A.; Windass, Amy S.; Schneck, Dennis W.
CS AstraZeneca, Wilmington, DE, USA
SO Clinical Pharmacology & Therapeutics (St. Louis, MO, United States) (2004), 76(2), 167-177
CODEN: CLPTAT; ISSN: 0009-9236
PB Elsevier Inc.
DT Journal
LA English
AB Background: Cyclosporine (INN, ciclosporin) increases the systemic exposure of all statins. Therefore rosuvastatin pharmacokinetic parameters were assessed in an open-label trial involving stable heart transplant recipients (≥6 mo after transplant) on an antirejection regimen including cyclosporine. Rosuvastatin has been shown to be a substrate for the human liver transporter organic anion transporting polypeptide C (OATP-C). Inhibition of this transporter could increase plasma concns. of rosuvastatin. Therefore the effect of cyclosporine on rosuvastatin uptake by cells expressing OATP-C was also examined Methods: Ten subjects were assessed while taking 10 mg rosuvastatin for 10 days; 5 of these were then assessed while taking 20 mg rosuvastatin for 10 days. Rosuvastatin steady-state area under the plasma concentration-time curve from time 0 to 24 h [AUC(0-24)] and maximum observed plasma concentration (Cmax) were compared with values in controls (historical data from 21 healthy volunteers taking 10 mg rosuvastatin). Rosuvastatin uptake by OATP-C-transfected Xenopus oocytes was also studied by use of radiolabeled rosuvastatin with and without cyclosporine. Results: In transplant recipients taking 10 mg rosuvastatin, geometric mean values and percent coefficient of variation for steady-state AUC(0-24) and Cmax were 284 ng · h/mL (31.3%) and 48.7 ng/mL (47.2%), resp. In controls, these values were 40.1 ng · h/mL (39.4%) and 4.58 ng/mL (46.9%), resp. Compared with control values, AUC(0-24) and Cmax were increased 7.1-fold and 10.6-fold, resp., in transplant recipients. In transplant recipients taking 20 mg rosuvastatin, these parameters increased less than dose-proportionally. Rosuvastatin had no effect on cyclosporine blood concns. The in vitro results demonstrate that rosuvastatin is a good substrate for OATP-C-mediated hepatic uptake (association constant, 8.5 ± 1.1 μmol/L) and that cyclosporine is an effective inhibitor of this process (50% inhibition constant, 2.2 ± 0.4 μmol/L when the rosuvastatin concentration was 5 μmol/L). Conclusions: Rosuvastatin exposure was significantly increased in transplant recipients on an antirejection regimen including cyclosporine. Cyclosporine inhibition of OATP-C-mediated rosuvastatin hepatic uptake may be the mechanism of the drug-drug interaction. Coadministration of rosuvastatin with cyclosporine needs to be undertaken with caution.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 78 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:515491 CAPLUS
DN 141:54359
TI Process for the preparation of rosuvastatin hemicalcium salt
IN Kumar, Yatendra; Meeran, Hashim Nizar Poovanathil Nagoor; De, Shantanu; Rafeeq, Mohammad; Sathyanarayana, Swargam
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 27 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004052867	A1	20040624	WO 2002-IB5213	20021210
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2509619	A1	20040624	CA 2002-2509619	20021210
	AU 2002348881	A1	20040630	AU 2002-348881	20021210
	EP 1578733	A1	20050928	EP 2002-781613	20021210
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, SK				
	CN 1742000	A	20060301	CN 2002-830195	20021210
	HU 2005000851	A2	20070828	HU 2005-851	20021210
	HU 2005000851	A3	20080228		
	US 20060149065	A1	20060706	US 2005-537859	20051109
PRAI	WO 2002-IB5213	W	20021210		

OS CASREACT 141:54359
GI



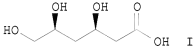
I

AB The present invention relates to a process for the preparation of rosuvastatin calcium, a promising new HMG-CoA reductase inhibitor. Thus, I was refluxed with the triphenylphosphanylidine hexanenitrile in toluene for 24 h to give the condensed product. The condensation product was dissolved in methanol and treated with methanesulfonic acid in water and stirred for 24 h at room temperature to give the cyanoketo alc. which was reduced using diethylmethoxyborane in THF, followed by sodium borohydride

to yield the cyanodiol. Concentrated HCl was added to the cyanodiol, and stirred for 12 h, and upon workup with calcium acetate gave rosuvastatin hemicalcium salt.

L4 ANSWER 79 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:364075 CAPLUS
DN 141:388103
TI The effect of gemfibrozil on the pharmacokinetics of rosuvastatin
AU Schneck, Dennis W.; Birmingham, Bruce K.; Zalikowski, Julie A.; Mitchell, Patrick D.; Wang, Yi; Martin, Paul D.; Lasseter, Kenneth C.; Brown, Colin D. A.; Windass, Amy S.; Raza, Ali
CS AstraZeneca, Miami, FL, USA
SO Clinical Pharmacology & Therapeutics (St. Louis, MO, United States) (2004), 75(5), 455-463
CODEN: CLPTAT; ISSN: 0009-9236
PB Elsevier Inc.
DT Journal
LA English
AB Background: Coadministration of statins and gemfibrozil is associated with an increased risk for myopathy, which may be due in part to a pharmacokinetic interaction. Therefore the effect of gemfibrozil on rosuvastatin pharmacokinetics was assessed in healthy volunteers. Rosuvastatin has been shown to be a substrate for the human hepatic uptake transporter organic anion transporter 2 (OATP2). Inhibition of this transporter could increase plasma concns. of rosuvastatin. The effect of gemfibrozil on rosuvastatin uptake by cells expressing OATP2 was also examined Methods: In a randomized, double-blind, 2-period crossover trial, 20 healthy volunteers were given oral doses of gemfibrozil, 600 mg, or placebo twice daily for 7 days. On the fourth morning of each dosing period, a single oral dose of rosuvastatin, 80 mg, was coadministered. Plasma concns. of rosuvastatin, N-desmethyl rosuvastatin, and rosuvastatin-lactone were measured. In addition, the effect of gemfibrozil on the uptake of radiolabeled rosuvastatin by OATP2-transfected Xenopus oocytes was studied. Results: Gemfibrozil increased the rosuvastatin area under the plasma concentration-time curve from time 0 to the time of the last quantifiable concentration [AUC(0-t)] 1.88-fold (90% confidence interval, 1.60-2.21) and the maximum observed rosuvastatin plasma concentration (Cmax) 2.21-fold (90% confidence interval, 1.81-2.69) compared with placebo. N-desmethyl rosuvastatin AUC(0-t) and Cmax decreased by 48% and 39%, resp. Pharmacokinetics of rosuvastatin-lactone was unchanged. The in vitro results indicate that the maximum gemfibrozil inhibition of rosuvastatin OATP2-mediated uptake was 50%; the inhibition constant for the inhibitory process was 4.0±1.3 μmol/L. Conclusions. Gemfibrozil increased rosuvastatin plasma concns. approx. 2-fold, which is similar to the effect of gemfibrozil on pravastatin, simvastatin acid, and lovastatin acid plasma concns. and substantially less than the effect observed for cerivastatin. Gemfibrozil inhibition of OATP2-mediated rosuvastatin hepatic uptake may contribute to the mechanism of the drug-drug interaction. Care is warranted when gemfibrozil is coadministered with rosuvastatin and other statins.
RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 80 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:356390 CAPLUS
DN 141:88974
TI Development of an efficient, scalable, aldolase-catalyzed process for enantioselective synthesis of statin intermediates
AU Greenberg, William A.; Varvak, Alexander; Hanson, Sarah R.; Wong, Kelvin; Huang, Hongjun; Chen, Pei; Burk, Mark J.
CS Diversa Corporation, San Diego, CA, 92121, USA
SO Proceedings of the National Academy of Sciences of the United States of America (2004), 101(16), 5788-5793
CODEN: PNASA6; ISSN: 0027-8424
PB National Academy of Sciences
DT Journal
LA English
OS CASREACT 141:88974
GI



I

AB A process is reported for efficient, enantioselective production of key intermediates, e.g. hexanoic acid I, for the common chiral side chain of statin-type cholesterol-lowering drugs such as Lipitor (atorvastatin) and Crestor (rosuvastatin). The process features a one-pot tandem aldol reaction catalyzed by a deoxyribose-5-phosphate aldolase (DERA) to form a 6-carbon intermediate with installation of two stereogenic centers from 2-carbon starting materials. An improvement of almost 400-fold in volumetric productivity relative to the published enzymic reaction conditions has been achieved, resulting in a com. attractive process that has been run on up to a 100-g scale in a single batch at a rate of 30.6 g/L per h. Catalyst load has been improved by 10-fold as well, from 20 to 2.0 wt % DERA. These improvements were achieved by a combination of discovery from environmental DNA of DERAs with improved activity and reaction optimization to overcome substrate inhibition. The two stereogenic centers are set by DERA with enantiomeric excess at >99.9% and diastereomeric excess at 96.6%. In addition, down-stream chemical steps have been developed to convert the enzymic product efficiently to versatile intermediates applicable to preparation of atorvastatin and rosuvastatin.
RE.CNT 21 THERE ARE 21 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 81 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2004:143119 CAPLUS
DN 140:187485
TI Process for preparing the calcium salt of rosuvastatin
IN Horbury, John; Taylor, Nigel Philip
PA Astrazeneca UK Limited, UK
SO PCT Int. Appl., 32 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2004014872	A1	20040219	WO 2003-GB3463	20030807
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2495296	A1	20040219	CA 2003-2495296	20030807
	AU 2003251369	A1	20040225	AU 2003-251369	20030807
	AU 2003251369	B2	20070201		
	EP 1539711	A1	20050615	EP 2003-784274	20030807
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	BR 2003013394	A	20050621	BR 2003-13394	20030807
	CN 1688551	A	20051026	CN 2003-823994	20030807
	JP 2006500347	T	20060105	JP 2004-527041	20030807
	NZ 538070	A	20060831	NZ 2003-538070	20030807
	RU 2326871	C2	20080620	RU 2005-102391	20030807
	NO 2005000542	A	20050228	NO 2005-542	20050131
	MX 2005PA01582	A	20050425	MX 2005-PA1582	20050209
	US 20060116391	A1	20060601	US 2005-524235	20050818
	ZA 2005000745	A	20060329	ZA 2005-745	20060110
PRAI	GB 2002-18781	A	20020813		
	WO 2003-GB3463	W	20030807		

AB An improved process for manufacture of rosuvastatin calcium, useful for the production of a pharmaceutical for treatment of, inter alia, hypercholesterolemia, hyperlipoproteinemia and atherosclerosis, is described. For example, rosuvastatin methylamine salt was mixed with 2M NaOH (0.93 equiv) and water to give a concentration of the sodium salt of 0.2M. Aliquots of the stock solns. were taken and the calcium salt precipitated by dropwise addition of a solution of CaCl2 (0.6 mol eq of a 0.7M aqueous solution) under the conditions of temperature of 40°, holding time of 30 min, and agitation rate of 550 rpm, to give rosuvastatin calcium in a yield of 64.6%.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 82 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:985727 CAPLUS
DN 140:12444
TI Absolute oral bioavailability of rosuvastatin in healthy white adult male volunteers
AU Martin, Paul D.; Warwick, Mike J.; Dane, Aaron L.; Brindley, Charlie; Short, Tracy
CS AstraZeneca, Macclesfield, Cheshire, UK
SO Clinical Therapeutics (2003), 25(10), 2553-2563
CODEN: CLTHDG; ISSN: 0149-2918
PB Excerpta Medica, Inc.
DT Journal
LA English
AB Rosuvastatin is a 3-hydroxy-3-methylglutaryl CoA-reductase inhibitor developed for the treatment of dyslipidemia. The results of clin. trials suggest that it is effective and well tolerated. The goals of this study were to determine the absolute bioavailability of an oral dose of rosuvastatin and to describe the i.v. pharmacokinetics of rosuvastatin in healthy volunteers. This was a randomized, open-label, 2-way crossover study consisting of 2 trial days separated by a ≥7-day washout period. Healthy male adult volunteers were given a single oral dose of rosuvastatin 40 mg on one trial day and an i.v. infusion of rosuvastatin 8 mg over 4 h on the other. Pharmacokinetic and tolerability assessments were conducted up to 96 h after dosing. A 3-compartment pharmacokinetic model was fitted to the plasma concentration-time profiles obtained for each volunteer after i.v. dosing.
Ten white male volunteers entered and completed the trial. Their mean age was 35.7 yr (range, 21-51 yr), their mean height was 177 cm (range, 169-182 cm), and their mean body weight was 77.6 kg (range, 68-85 kg). The absolute oral bioavailability of rosuvastatin was estimated to be 20.1%, and the hepatic extraction ratio was estimated to be 0.63. The mean volume of distribution at steady state was 134 L. Renal clearance accounted for .apprx.28% of total plasma clearance (48.9 L/h). Single oral and i.v. doses of rosuvastatin were well tolerated in this small number of healthy male volunteers. The absolute oral bioavailability of rosuvastatin in these 10 healthy volunteers was .apprx.20%, and absorption was estimated to be 50%. The volume of distribution at steady state was consistent with extensive distribution of rosuvastatin to the tissues. The modest absolute oral bioavailability and high hepatic extraction of rosuvastatin are consistent with first-pass uptake into the liver after oral dosing. Rosuvastatin was cleared by both renal and nonrenal routes; tubular secretion was the predominant renal process.
RE.CNT 24 THERE ARE 24 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 83 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:931341 CAPLUS
DN 139:395947
TI Process for the preparation of rosuvastatin
IN Kumar, Yatendra; De, Shantanu; Rafeeq, Mohammad; Meeran, Hashim Nizar Poovanathil Nagoor; Sathyanarayana, Swargam
PA Ranbaxy Laboratories Limited, India
SO PCT Int. Appl., 31 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

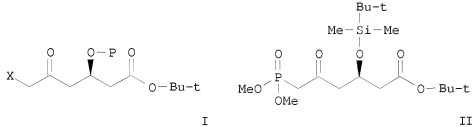
	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003097614	A2	20031127	WO 2003-IB1946	20030521
	WO 2003097614	A3	20040521		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	IN 2002DE00575	A	20040228	IN 2002-DE575	20020521
	AU 2003228010	A1	20031202	AU 2003-228010	20030521
	BR 2003011195	A	20050222	BR 2003-11195	20030521
	EP 1585736	A2	20051019	EP 2003-725478	20030521
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				
	IN 2004DN03803	A	20071130	IN 2004-DN3803	20041201
	US 20050222415	A1	20051006	US 2005-515361	20050425
PRAI	IN 2002-DE575	A	20020521		
	WO 2003-IB1946	W	20030521		

AB The present invention relates to a cost effective and industrially advantageous process for the preparation of 4-4-(fluorophenyl)-6-isopropyl-2-(N-methyl-N-methylsulfonylamino)-5-pyrimidinecarboxaldehyde as intermediate for the preparation of rosuvastatin.

L4 ANSWER 84 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2003:837098 CAPLUS
DN 139:337984
TI Preparation of rosuvastatin and related HMG-CoA reductase inhibitors via a common chiral intermediate
IN Lim, Kwang-Min
PA CLS Laboratories, Inc., S. Korea
SO PCT Int. Appl., 26 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2003087112	A1	20031023	WO 2003-KR707	20030409
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	KR 2003080620	A	20031017	KR 2002-19340	20020409
	AU 2003219592	A1	20031027	AU 2003-219592	20030409
PRAI	KR 2002-19340	A	20020409		
	WO 2003-KR707	W	20030409		

OS CASREACT 139:337984; MARPAT 139:337984
GI



I II

AB A process for the preparation of rosuvastatin and related HMG-CoA reductase inhibitors via the common chiral intermediate I [X = P(=O)R12, S(O)R1; R1 = H, alkyl, aryl; P = OH protecting group, e.g., t-butyldimethylsilyl] was disclosed. For example, condensation of Et tert-Bu (3R)-3-hydroxyglutaric acid, e.g., prepared from diethyl-3-hydroxyglutaric acid in 3-steps, and the sodium salt of di-Me methylphosphonate afforded claimed chiral phosphonate II in 77% yield and 99.1% chiral purity. Of note is the enantioselective esterase mediated hydroylsis of diethyl-3-hydroxyglutaric acid in 99.5% chiral purity. The preparation of the sodium salt of rosuvastatin using chiral phosphonate II was also provided. The present invention does not have the problem of removing reaction byproducts and the disposal of waste associated with current methodologies.

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 85 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2002:946266 CAPLUS
DN 138:24717
TI Process for preparing chiral diol sulfones and dihydroxy acid HMG CoA reductase inhibitors
IN Brodfuehrer, Paul R.; Sattelberg, Thomas R., Sr.; Kant, Joydeep; Qian, Xinhua
PA Bristol-Myers Squibb Company, USA
SO PCT Int. Appl., 84 pp.
CODEN: PIXXD2
DT Patent
LA English
FAN.CNT 1

	PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI	WO 2002098854	A2	20021212	WO 2002-US17269	20020530
	WO 2002098854	A3	20030327		
	W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, OM, PH, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZM, ZW				
	RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
	CA 2449813	A1	20021212	CA 2002-2449813	20020530
	AU 2002310261	A1	20021216	AU 2002-310261	20020530
	US 20030018199	A1	20030123	US 2002-158355	20020530
	US 6875867	B2	20050405		
	EP 1392656	A2	20040303	EP 2002-737324	20020530
	R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
	BR 2002009942	A	20040330	BR 2002-9942	20020530
	TR 200400600	T3	20040621	TR 2004-600	20020530
	JP 2004536813	T	20041209	JP 2003-501843	20020530
	HU 2004001724	A2	20041228	HU 2004-1724	20020530
	CN 1656077	A	20050817	CN 2002-810927	20020530
	TW 256391	B	20060611	TW 2002-91111890	20020603
	IN 2003DN01752	A	20051014	IN 2003-DN1752	20031027
	MX 2003PA11195	A	20040318	MX 2003-PA11195	20031204
	US 20050124641	A1	20050609	US 2005-39702	20050120
PRAI	US 2001-296403P	P	20010606		
	US 2002-158355	A3	20020530		
	WO 2002-US17269	W	20020530		

OS MARPAT 138:24717
GI

AB Title Compds. I and II [X1 = F3CSO3, MeSO3, 4-MeC6H4SO3, RS, RSO2; R =

(un)substituted tetrazolyl, Ph, 2-benzoxazolyl, 2-benzothiazolyl; R1 = alkyl, cycloalkyl, aralkyl, Cbz; R2 = substituted tetrahydronaphthyl, pyrrolyl, pyrimidinyl, pyridinyl] were prepared as intermediates for HMG CoA inhibitors. Thus, the diol III was prepared as its arginine salt from the benzocycloheptapyridinecarboxaldehyde and the sulfone I [X1 = 1-phenyl-5-tetrazolylsulfonyl, R1 = CMe3], both of which were prepared in several steps.

L4 ANSWER 86 OF 86 CAPLUS COPYRIGHT 2008 ACS on STN
AN 2001:239443 CAPLUS
DN 135:235642
TI Preclinical and clinical pharmacology of rosuvastatin, a new 3-hydroxy-3-methylglutaryl coenzyme A reductase inhibitor
AU McTaggart, F.; Buckett, L.; Davidson, R.; Holdgate, G.; McCormick, A.; Schneck, D.; Smith, G.; Warwick, M.
CS AstraZeneca, Alderley Park, UK
SO American Journal of Cardiology (2001), 87(5A), 28B-32B
CODEN: AJCDAG; ISSN: 0002-9149
PB Excerpta Medica, Inc.
DT Journal; General Review
LA English
AB A review with 8 refs. Rosuvastatin (formerly known as ZD4522) is a new 3-hydroxy-3-methylglutaryl CoA (HMG-CoA) reductase inhibitor (statin) with distinct pharmacol. properties. Compared with most other statins, it is relatively hydrophilic, similar in this respect to pravastatin. Rosuvastatin has been shown to be a comparatively potent inhibitor of HMG-CoA reductase activity in a purified preparation of the catalytic domain of the human enzyme, as well as in rat and human hepatic microsomes. In rat hepatocytes, rosuvastatin had higher potency as an inhibitor of cholesterol synthesis than 5 other statins. Rosuvastatin was approx. 1000-fold more potent in rat hepatocytes than in rat fibroblasts. Further studies in rat hepatocytes demonstrated that rosuvastatin is taken up into these cells by a high-affinity active uptake process. Rosuvastatin was also taken up selectively into the liver after i.v. administration to rats. Potent and prolonged HMG-CoA reductase inhibitory activity has been demonstrated after oral administration to rats and dogs. Pharmacokinetic studies in humans given oral doses of 5-80 mg showed that maximum plasma concns. and areas under the concentration-time curve are approx. linear with dose. The terminal half-life is approx. 20 h. Studies with human hepatic microsomes and human hepatocytes have suggested little or no metabolism via the cytochrome P 450 3A4 isoenzyme. On the basis of these observations, it is suggested that rosuvastatin has the potential to exert a profound effect on atherogenic lipoproteins.
RE.CNT 8 THERE ARE 8 CITED REFERENCES AVAILABLE FOR THIS RECORD
ALL CITATIONS AVAILABLE IN THE RE FORMAT

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COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY     SESSION
FULL ESTIMATED COST                                   265.38      265.59

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)          SINCE FILE      TOTAL
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CA SUBSCRIBER PRICE                                   -68.80      -68.80

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